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PERSONAL

Mr. J. Dwight Brady has been elected District Engineer of Fall River, Mass.

Mr. J. S. Humphrey will succeed Mr. G. A. Gessner, Jr., as City Engineer of Findlay, O.

Mr. Robert H. Moth has been elected City Engineer of Kenosha, Wis., to succeed Mr. J. B. Davidson.

Mr. Arthur N. French has been appointed Superintendent of the Water-Works Department of Hyde Park, Mass.

Mr. William C. Haddock has been selected as Director of Public Works of Philadelphia, Pa., by Mayor-elect Ashbridge.

Mr. Teburcio Castaneda, of Havana, Cuba, is in New York city negotiating for the sale of several Cuban railway systems.

Mr. Orley Rose has been appointed Chief Engineer to the Water Board of Lorain, O., succeeding Mr. F. C. Norcross, resigned.

Mr. Edward Robinson, Proprietor of the Wells Light Mfg. Co., of New York, expects to sail on the "Lucania" for England, on April 8.

Mr. Frank O. Maxson, U. S. Engineer Corps, has been appointed Head of the Yards and Dock Department of the Navy Yard at Boston, Mass.

Messrs. Albert Touron and Guillaume Boulade, engineers of the Orleans Ry. of France, are in this country inspecting electric power houses.

Col. Arthur W. Soper, President of the Safety Car Heating & Lighting Co., of New York city, has gone to Europe for a two months' pleasure trip.

Mr. A. C. Hopkins has been appointed Naval Architect for the Newport News Shipbuilding & Dry-Dock Co., to succeed Mr. W. C. Foley, who recently went to Europe.

Mr. A. T. Hardin has been appointed Acting Division Engineer of the Eastern Division of the New York Central & Hudson River R. R., vice Mr. G. W. Bartlett, transferred.

Mr. Charles J. Poetsch, M. Am. Soc. C. E., has been appointed City Engineer of Milwaukee, Wis., to succeed Mr. Geo. H. Benzenberg, whose retirement was noted in our last issue.

Mr. Charles O. Haines, General Manager of the Atlantic & Danville Ry. Co., has also been appointed Chief Engineer of the North & South Carolina R. R. Co., with offices at Norfolk, Va.

Mr. A. M. Kinsman, formerly Chief Engineer of the Wisconsin & Michigan R. R., has been appointed Chief Engineer of Construction of the lines of the Baltimore & Ohio R. R. west of the Ohio River.

Mr. W. B. Redgrave and Mr. C. M. James, of Baltimore, Md., and Mr. W. J. Yoder, of Chicago, Ill., have been appointed Resident Engineers on the double-tracking of the Baltimore & Ohio R. R., between Bellaire, O., and Spencers, O.

Dr. John T. Nicholson, Professor of Mechanical Engineering in McGill University, has resigned, after eight years of service, to become the Head of the Mechanical and Electrical Engineering departments of the Municipal Technical School now being established at Manchester, England.

Mr. Arthur Hay has joined the firm of Gillette & Gillette, the new firm becoming Gillette, Hay & Gillette, civil engineers and contractors, of Rochester, N. Y. Mr. Hay is a graduate of the engineering department of Columbia University, and for some years past has been the Manager of the Abbott Mining Co., of California.

OBITUARY.

Mr. John T. Finigan, Superintendent of the Lyons Water-Works Co., of Lyons, N. Y., died on April 1, at the age of 30 years, from injuries received at a fire.

Mr. James E. Williams, formerly Chief Engineer of the Miami Division of the Pennsylvania System, died at his home in St. Louis, Mo., on April 4, aged 72 years.

Mr. Charles Irwin Brown, M. Am. Soc. C. E., died at his home in Mankato, Minn., on March 24, aged 45 years. For several years he was Chief Engineer of the St. Louis & San Francisco R. R.

Mr. Robert H. Brown, Chief Engineer of the Delaware & Hudson Canal Co., died at his home in Albany, N. Y., on March 27, from typhoid fever. He was born in 1858, and for the last 20 years had been in the service of this company.

Mr. George A. Button, an assistant engineer of the Department of Docks and Ferries of New York city, in charge of the department yard at 57th St. and the North River, died at his home in this city on April 3, from consumption.

Marquis Charles Philippe de Chennevieres, Member of the Institute, Director of the Academie des Beaux-Arts and Chairman of the Board of Administration of the Paris Exposition of 1878, died in Paris, France, on April 2, aged 79 years.

Rear-Admiral Charles C. Carpenter, U. S. Navy, committed suicide at the Adams Nervine Asylum, of Boston, on April 1. He was born at Greenfield, Mass, on Feb. 27, 1834, and was appointed a midshipman from Massachusetts in 1850, and later entered the U. S. Naval Academy. In 1896 he was retired with the rank of Rear-Admiral, and during the late war with Spain was recalled to act as Commandant of the Portsmouth Navy Yard.

Mr. Thomas S. Moore, one of the new East River Bridge Commissioners, and for a long time counsel for the Brooklyn City R. R. Co. and the Metropolitan Traction Co., died at his home in Brooklyn, N. Y., on April 1, aged 57. Mr. Moore graduated from the Harvard Lawrence Scientific School in 1861, where he was for a time an instructor in chemistry. In 1862 he studied law with Judge William Fullerton, and after admission to the bar made state and corporation litigation a specialty.

Brig.-Gen. Daniel W. Flagler, Chief of Ordnance, U. S. A., died at Old Point Comfort, Va., on March 29, as the result of an illness of some length. Gen. Flagler was appointed to the Military Academy from New York on July 1, 1856, and was graduated as a Brevet Second Lieutenant of Ordnance on June 24, 1861. He at once entered service in the Civil War as aide to Gens. Hunter and McDowell; took part in the Burnside expedition to Roanoke, N. C., and as ordnance officer and aide he was in the battles of South Mountain, Antietam, Fredericksburg, Chancellorsville, Gettysburg and minor engagements. At the close of the war he was brevetted Lieut.-Colonel for faithful and meritorious services, and then began service as an ordnance officer at the various arsenals, and served on a number of boards reporting on powder, gun carriages, heavy guns, etc. In 1891 he was made a Brigadier-General and Chief of the Ordnance Bureau, and was largely instrumental in developing the new ordnance of the army and that for coast defence.

ENGINEERING SOCIETIES

COMING TECHNICAL MEETINGS.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
April 7. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.
CHICAGO ELECTRICAL ASSOCIATION.
April 7. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.
MONTANA SOCIETY OF ENGINEERS.
April 8. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.
THE LOUISIANA ENGINEERING SOCIETY.
April 10. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
ENGINERS' CLUB OF KANSAS CITY.
April 10. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.
DENVER SOCIETY OF CIVIL ENGINEERS.
April 11. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.
NORTHWEST RAILWAY CLUB.
April 11. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
April 11. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.
NEW ENGLAND RAILWAY CLUB.
April 11. Secy., Edw. L. Janes, P.O. Box 1158, Boston, Mass.
FRANKLIN INSTITUTE.
April 12. "Riddles Wrought in Iron and Steel," Paul Krenzpointner. Secy., Wm H. Wahl, 15 South 7th St., Philadelphia, Pa.
AMERICAN INSTITUTE OF ARCHITECTS (New York Chapter).
April 12. Secy., Chas. I. Berg, 10 West 23d St., New York city.
AMERICAN RAILWAY ASSOCIATION.
April 12. Detroit, Mich. Secy., W. F. Allen, 24 Park Place.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
April 12. Secy., H. C. McLeod, 112 Mansfield St., Montreal, Que.
BROOKLYN ENGINEERS' CLUB.
April 13. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.
ENGINEERING ASSOCIATION OF THE SOUTH.
April 13. Secy., H. M. Jones, 1000 Broad St., Nashville, Tenn.
ST. LOUIS RAILWAY CLUB.
April 14. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.
WISCONSIN STATE CHEMICAL ASSOCIATION.
April 14. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.
THE ENGINEERS' CLUB OF PHILADELPHIA.
April 15. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.
ENGINEERS' CLUB OF COLUMBUS.
April 15. Secy., H. M. Gates, 12½ North High St., Columbus, O.
ENGINEERS' CLUB OF ST. LOUIS.
April 17. Secy., E. R. Fish, 2401 N. Spring Ave., St. Louis, Mo.
TECHNICAL CLUB OF OMAHA.
April 17. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' CLUB OF MINNEAPOLIS.
April 17. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
April 17. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.
WESTERN RAILWAY CLUB.
April 18. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
April 18. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
BOSTON SOCIETY OF CIVIL ENGINEERS.
April 19. Secy., S. E. Tinkham, City Hall, Boston, Mass.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
April 19. Secy., C. W. Hunt, 220 W 57th St., New York city.
WESTERN SOCIETY OF ENGINEERS.
April 19. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.
WESTERN FOUNDRYMEN'S ASSOCIATION.
April 19. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.
ENGINEERS' CLUB OF CINCINNATI.
April 20. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
April 20. Secy., F. A. Charpiot, P.O.Box 13, Savannah, Ga.
NEW YORK RAILROAD CLUB.
April 20. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.
ROCHESTER ENGINEERING SOCIETY.
April 21. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.
THE DETROIT ENGINEERING SOCIETY.
April 21. Secy., Henry Goldmark, Wayne Co. Savings Bank Bldg., Detroit, Mich.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
April 26. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.

ROCHESTER ENGINEERING SOCIETY.—In response to an invitation extended by The Rochester Gas & Electric Co., the society visited the gas works and the three electric stations of the company on April 1.

NEW YORK ELECTRICAL SOCIETY.—A meeting of this society was held, by courtesy of the American Society of Civil Engineers, at the Society house, New York city, on March 29. Prof. Elihu Thomson delivered an entertaining lecture on "Electricity at High Pressures," illustrating his remarks with experiments. Some new devices were shown for the first time, and several experiments were given to show the action of the Wehnelt Electrolytic Interrupter.

THE BLACK RIVER WATER POWER ASSOCIATION.—The annual meeting of this association was held at Watertown, N. Y., on March 22. Mr. James P. Lewis, Beaver Falls, N. Y., read a paper treating of the water power possibilities of the Black River valley. Reports were received from sub-committees, and later the following officers were elected for the ensuing year. Pres., D. C. Middleton; First Vice-Pres., Henry Binninger; Second Vice-Pres., Dr. F. E. Robinson; Third Vice-Pres., George C. Hazleton; Secy., Fred W. Babcock.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS, Junior Meeting.—The 2d regular Junior meeting of this society was held at the Society House, New York city, on April 4. Mr. A. L. Rice presented a paper on "The Compression and Liquefaction of Gases," which considered principally the liquefaction of air. The paper was supplemented by a number of interesting experiments with liquid air, obtained through the courtesy of Mr. Chas. E. Tripler, whose apparatus was described in Engineering News for April 14, 1898. This was the last Junior meeting for this season.

FRANKLIN INSTITUTE.—A meeting of the Electrical Section of the Institute was held at Philadelphia on March 28. Mr. Frank J. Sprague presented a paper on "The Multiple Unit System of Electric Railways," in which the principles and claims of the Sprague Multiple Unit System were fully described.

A second paper was read by Mr. Albert B. Herrick entitled, "Electrical Inspection of Street Car Equipments." Among the conclusions of the paper was one which embodies the secret of efficient operation of any and all parts of a street railway equipment:

The maintenance of an equipment is much more satisfactory and economical than trusting to Providence and waiting until it breaks down; in other words, it is far better for a street railway manager to operate a sanitarium for his equipments than a hospital.

The concluding paper, entitled "Some of the Larger Transportation Problems in Cities," by Edward A. Higgins, editor of the "Street Railway Journal," was more general in character, and treated largely of the relations between railway companies and municipalities. In substance Mr. Higgins said that the manager of a large railway system must satisfy the investors, please the public and prevent discontent among employees. The people often believe the companies to be grasping and desirous only of making large returns to stockholders, and the companies are harassed by complaints of inconveniences, large and small, and often come to regard the public as unreasonable in its demands.

The plans on which city railways were laid out were classified as: (1) The peninsula plan, like New York city; (2) the valley plan, like Pittsburg; (3) the radiating plan, with territory on one side only of the water front, like Boston and Chicago; and (4) the radiating plan, with territory on both sides the water front, like Paris and London. These systems were considered in detail. The problem of motive power was touched upon, and the need of some satisfactory independent motor pointed out, in the absence of which the conduit and overhead electric were favored. Methods of conveying power to the car were classified under the three heads: of overhead, open slot conduit and the button system, of which the latter was at present the untried and consequenly least reliable form.

In conclusion the question of cars and car service was considered, and the statement was made that:

success in handling street railway property is to run cars so frequently as to catch all the short riders, people who would walk if the car was not in sight. The car must be comfortable, well lighted, clean and attractive. The question of fares depended upon local conditions. A uniform fare means the depopulation of the tenement house districts, a seeking of purer air in the suburbs. A graded fare means enormous density of population in the heart of the city and scanty suburban settlements.

AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION.—This association completed its organization at a meeting held in Buffalo, N. Y., March 30, 1899, by the adoption of a constitution and by the election of permanent officers according to the provisions of this constitution. As noted in Engineering News of Nov. 3 and 24, 1898, the preliminary meeting looking toward the formation of an association of engineers and railway officials engaged in the location, construction and maintenance of railways was held in Chicago, Ill., on Oct. 21, 1898. At this meeting a temporary organization was completed, a name was adopted for the proposed new association, and a committee was appointed to draw up a constitution. The members of this committee were: Mr. John F. Wallace, M. Am. Soc. C. E., Illinois Central R. R.; Mr. Thomas Rodd, M. Am. Soc. C. E., Pennsylvania Lines West of Pittsburg; Mr. W. G. Curtis, M. Am. Soc. C. E., Southern Pacific Co.; Mr. C. H. Hudson, Southern Ry.; and Mr. P. Alexander Peterson, M. Am. Soc. C. E., Canadian Pacific Ry. Mr. A. Torrey, Michigan Central R. R., was elected temporary chairman of the association, and Mr. L. C. Fritch, Baltimore & Ohio Southwestern Ry., temporary secretary. The call for the Buffalo meeting was issued by these temporary officers, and, as already stated, its principal business was the adoption of a constitution and the election of permanent officers. The main provisions of the constitution, which was adopted, are, in abstract, as follows:

The object of the association shall be the advancement of knowledge pertaining to the scientific and economical location, construction, operation and maintenance of railways, and the means employed to this end shall be: (1) Meetings for the reading and discussion of papers and for social intercourse; (2) the investigation of matters pertaining to the objects of the association through standing and special committees; (3) the publication of papers, reports and discussions; (4) the maintenance of a library. Membership shall be of two classes, active and honorary. Any civil, mechanical or electrical engineer who has had five years' experience in the location, construction or maintenance of railways; and any railway official who is responsible for or has supervision of maintenance of way matters (embracing all grades of officials, from General Managers to Engineers of Maintenance of Way in Charge of Divisions, inclusive), or railway men bearing other titles but performing similar duties, shall be eligible for active membership. Honorary members shall be persons of acknowledged eminence in railway engineering and management, and shall never exceed ten in number. Persons who are exclusively engaged in the sale or promotion of railway patents or appliances shall not be eligible for membership. The initiation fee shall be $10 and the annual dues $10. The officers shall consist of a President, two Vice-Presidents, six Directors, a Secretary and a Treasurer, who shall constitute a Board of Direction. The term of office of the President, Secretary and Treasurer shall be one year; of the Vice-Presidents two years, and of the Directors three years; except, however, that at the first election of officers after the adoption of this constitution one Vice-President and two Directors shall be elected to serve one year, one Vice-President and two Directors for two years, and two Directors for three years; provided also that after the first annual election one Vice-President and two Directors shall be elected each year in addition to the President, Secretary and Treasurer. At least 30 days before each annual meeting the Board of Directors, which shall act as a nominating committee, shall nominate to the society a list of officers for the next ensuing year. At any time prior to the 30 days before the annual meeting any ten members of the society shall have the right to nominate officers for the ensuing year. The Board of Direction may appoint such standing committees as it may deem best to investigate, consider and report upon methods or appliances pertaining to the general question of railway location, construction and maintenance. Special committees to examine into and report upon any subject connected with the purposes of this association may be appointed in the following manner: A resolution to appoint such a committee and to set forth its objects and the number of its members may be presented by letter at any time to the Secretary of the Association if signed by ten active members, and shall be referred by him to the Board of Direction, which, if it sees fit, may appoint such committee. If the Board of Direction shall not deem it expedient to appoint such committee the members requesting its appointment shall be notified, and the matter will then be referred to the association at its next annual meeting and decided upon by ballot. If two-thirds of the members present vote in favor of the committee, it shall be appointed by the President. The offices of the association shall be at Chicago, but its annual meeting shall be held each year at such place and at such time as may be selected by the Board of Directors.

Immediately after the adoption of the constitution the meeting proceeded to the election of officers. The election resulted as follows: President, John F. Wallace, M. Am. Soc. C. E., Illinois Central R. R.; Vice-Presidents, P. A. Peterson, M. Am. Soc. C. E., Canadian Pacific Ry.; W. G. Curtis, M. Am. Soc. C. E., Southern Pacific Co.; Treasurer, W. S. Dawley, Chicago & Eastern Illinois R. R.; Secretary, L. C. Fritch, Baltimore & Ohio Southwestern R. R.; Directors, W. H. McFarlan, Chicago, Rock Island & Pacific Ry.; Hunter McDonald, M. Am. Soc. C. E., Nashville, Chattanooga & St. Louis Ry.; D. J. Whittemore, M. Am. Soc. C. E., Chicago, Milwaukee & St. Paul Ry.; F. H. McGuigan, Grand Trunk Ry.; A. Torrey, Michigan Central R. R., and Thomas Rodd, M. Am. Soc. C. E., Pennsylvania Lines West of Pittsburg.

NEW PUBLICATIONS.

HAND-BOOK OF RAILROAD SECURITIES.—Compiled by the "Commercial and Financial Chronicle," Wm. B. Dana Co., New York. Cloth; 8½ × 4¾ ins.; pp. 194.

The purpose of this publication is to give in handy form for reference the prices of railway securities at the leading exchanges in America. It will be an annual publication, and will cover the twelve months of the calendar year preceding its publication in January. The contents of the present volume are: statement showing stocks and bonds, and also the income for a series of years past, as well as the present annual charges against income of railways whose securities are commonly sold in the markets of New York, Boston, Philadelphia and Baltimore, 70 pages; highest and lowest prices monthly and yearly of railway and miscellaneous bonds and stock in New York, Boston, and Philadelphia, 100 pages; date of highest and lowest prices for four years past in four cities named above, 10 pages, and dividends on railway and miscellaneous stocks paid during each year 1892-1898, inclusive.

NEW YORK STATE ENGINEER AND SURVEYOR'S REPORT FOR 1897.—Campbell W. Adams, State Engineer and Surveyor. Pub. Doc. Cloth; 6 × 9 ins.; pp. 460; illustrated.

This report brings the work of the State Engineer and Surveyor only down to Sept. 30, 1897, and therefore contains almost nothing relating to the exciting developments which the last 18 months have witnessed in connection with the State Canals improvement work. In fact, it was at about the date of the report that the public was first made aware of the fact that the $9,000,000 apropriation would be inadequate to pay for the improvements planned, and Mr. Adams devotes a considerable proportion of his report to explaining the reasons for the greater expenditure than was first understood to be necessary. Our readers are, however, familiar with the general details of the State Canals scandals, and they need not be mentioned further here than to state that the progress of the work up to the date of the report is recorded in some detail, and numerous half-tone engravings are given to show the character of this work and the conditions under which it was accomplished. The report contains besides these a pretty full account of the topographical survey of the state now in progress, and a special report upon a series of concrete tests, which were made by Mr. Geo. W. Rafter, M. Am. Soc. C. E., which we shall abstract in a future issue.

TEXAS RAILROAD COMMISSIONERS' REPORT FOR 1898.—John H. Reagan and T. J. Storey, Commissioners. Pub. Doc. Paper; 6 × 9 ins.; pp. 244.

The annual reports of this Commission as we have taken occasion to mention in the past, are among the most interesting issued by the various state railway commissions of the United States. This present report is no exception to the rule. Probably in the report of no other state railway commission are the statistics regarding the state's railways so complete, and based upon such reliable information. As some of our readers may remember the Texas State Constitution requires that every chartered railway shall maintain general offices within the state, and that its officials shall render separate and distinct accounts of all its traffic, earnings, expenses, etc. With a few exceptions all of the railways of the state originate and end within its boundaries, which makes such a separate rendering of accounts easy and possible. As a result, we have in the present report 25 tables of statistics covering almost every item of the physical character and condition, cost of construction and equipment, present valuation, financial standing, earnings and expenses, etc., of every railway in the state. These tables of statistics form an appendix to the report.

The report proper of the Commissioners relates particularly to the management of the Commission, methods of making inspections, valuations and reports; also to the issuance of free passes and an explanation of their position in regard to the recent injunction suits whereby they were enjoined from enforcing the operation of their rates and tariffs. The Railroad Commission of Texas has full authority to regulate and adjust rates and tariffs on all freight originating within the state. In November, 1898, ten of the principal railways in the state sought and obtained an order from the Federal Courts restricting the Commission from putting into effect any of its rates and tariffs issued subsequently to August, 1894. The rates in effect were declared to be unjust and confiscatory, and at the time were so adjudged by the Court. The power of the Commission with regard to making rates was, however, not affected. Pending the final hearing of the injunction cases before the Court, the railways involved effected a compromise whereby rates and tariffs were agreed upon which would permit the railways a small increase in their earnings, estimated at about 3%. The Commission still reserves its right to make and change rates. None of its powers were given up by the compromise. These compromise tariffs have been published in Circular 766 of the Commission, which has just been issued. Some of the special features of the report are discussed at length in our editorial columns.

TRADE PUBLICATIONS

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins. and 9 x 12 ins.)

BRIGHTMAN MECHANICAL STOKER.—Brightman Furnace Co., Cleveland, O. Circular. This is a folded circular giving illustrations of the construction and use of this form of stoker.

SPRINGS.—Geo. Cooper & Co., Cleveland, O. Pamph.; 5⅜ × 3¼ ins.; pp. 39; illustrated. This pamphlet contains illustrations of carriage and wagon springs, and several tables giving sizes and prices of the different forms.

AKRON BELTING.—The Akron Belting Co., Akron, O. Pamph.; 3½ × 6 ins.; illustrated.

This is an illustrated price list of leather and rubber belting, packing, steam hose, hose reels, belt tools, oil filters, etc.

WIRE CLOTH.—The W. S. Tyler Wire Works Co., Cleveland, O. Pamph.; 6 × 8⅝ ins.; pp. 64; illustrated. This is a price list in which are given illustrations of the different meshes of wire cloth and the prices of the same per sq. ft. when made of steel, copper or brass.

EXCAVATING MACHINERY.—The Bucyrus Co., South Milwaukee, Wis.; cloth, 11 × 7 ins.; pp. 113; illustrated.

This publication illustrates and describes briefly the various types of excavating machinery, including steam shovels, dredges, cranes, placer mining machinery, etc., manufactured by the company named. The construction and capacity of the various machines are stated in order, and a particularly full description and discussion of the placer mining machinery concludes the book.

INDUSTRIAL RAILWAYS.—C. W. Hunt Co., New York. Pamph., 7 × 9 ins.; pp. 47; illustrated.

This is a very fully illustrated descriptive catalogue of track, cars and equipment for the well known types of push car railways manufactured by the above firm for handling coal, ashes, etc., around industrial plants, yards, etc., etc.

MEASURING TAPES.—The Lufkin Rule Co., Saginaw, Mich. Paper; 3⅝ × 5⅝ ins.; pp. 22.

This is a catalogue and price list of steel, linen and corded tapes, 25 to 100 ft. in length, the steel tapes being wound in cases or on frames. One of the specialties is a 50-ft. steel tape, only ¼-in. wide, with a small flat case, so that it can be carried conveniently in the pocket.

MARINE ENGINES, BOILERS, ETC.—The Globe Iron Works Co., Cleveland, O. Paper, 10½ × 7 ins.; pp. 39; illustrated.

Included in the output of this company are lake steamships, up to 383 ft. in length; triple expansion marine engines; marine boilers; steam steering gear, and steering engines; steam capstans, etc. In each case these are illustrated in the catalogue by photogravures.

ROCK AND ORE BREAKERS.—Gates Iron Works, Chicago, Ill. Pamph.; 6 × 9 ins.; pp. 86; illustrated.

About one-third of this pamphlet is devoted to describing the various sizes and styles of rock and ore crushing machinery made by this well known firm, and the remainder contains a large number and variety of testimonials from those who have employed the different apparatus.

NASH GAS AND GASOLINE ENGINES.—National Meter Co., New York city. Pamph.; 8¾ × 5¾ ins.; pp. 32; illustrated.

The intent of this pamphlet is to afford a brief and at the same time clear idea of the Nash gas and gasoline engines, and some of the many practical applications to which they have been put. Half-tone illustrations of various engines, brief descriptions and tables of dimensions are included.

THE NATIONAL FEED WATER HEATER.—The National Pipe Bending Co., New Haven, Conn. Pamph.; 3½ × 6 ins.; pp. 24; illustrated. This neat little pamphlet begins with a reproduction of the certificate of merit received at the World's Fair for a feed water heater, and then briefly describes the construction of the heater mentioned. This is followed by tables giving the sizes, weights and capacities and several illustrations showing the construction of the different forms of National heaters. A couple of pages are devoted to illustrations of examples of pipe coiling and bending done by this concern.

RAILWAY CARS.—The Bloomsburg Car Manufacturing Co., Bloomsburg, Pa., Cornell, Underhill & Boyd, Agents, 13 Gold St., New York city. Paper; 9½ × 6½ ins.; pp. 72; illustrated.

This firm manufactures all manner of freight, mine, dump, logging and export cars; and the catalogue gives, in each case, the capacity, weight, dimensions, etc. Especial attention is paid to the construction of cars for export, for use on plantations and for broad or narrow gage roads, and portable track, switches and turntables are included in the outfit. Dump-cars of various types are also made for quarry and contract work—some of these having steel frames and bodies.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Apr. 6.	Water pipe, Yonkers, N. Y.		Mar. 30
Apr. 6.	Submerged sewer, New London, Conn. Advertised, Engineering News, Mar. 16.		Mar. 16
Apr. 6.	Pipe sewers, New London, Conn. Advertised, Engineering News, Mar. 16.		Mar. 16
Apr. 6.	Street railway, Cleves, O.		Mar. 23
Apr. 6.	Wall and roadway, Marblehead, Mass.		Apr. 6
Apr. 6.	Sewers, Newark, N. J.		Apr. 6
Apr. 6.	Water supply, Newark, N. J.		Apr. 6
Apr. 6.	Brick pvg. and curbing, Charleston, W. Va.		Apr. 6
Apr. 7.	Laying water pipe, etc., Pittsburg, Pa.		Apr. 6
Apr. 7.	Sidewalks and street work, Dayton, O.		Apr. 6
Apr. 7.	Street sprinkling, St. Louis, Mo.		Mar. 23
Apr. 7.	Water pipe, etc., Austin, Minn. Advertised, Engineering News, Mar. 23.		Mar. 23
Apr. 7.	Bridge at Center St., Cleveland, O.		Mar. 16
Apr. 7.	Iron bridges, Iowa City, Ia.		Mar. 30
Apr. 7.	Masonry work, Providence, R. I. Advertised, Engineering News, Mar. 30.		Mar. 30
Apr. 8.	Bridge abutments, Chatham, Ont.		Mar. 30
Apr. 8.	Gas and electric lighting, Brockton, Mass.		Mar. 30
Apr. 8.	Sewers, Washington, D. C.		Mar. 30
Apr. 8.	Extending electric plant, Norfolk, Va.		Mar. 16
Apr. 8.	Artesian well, Fort McPherson, Ga.		Mar. 16
Apr. 8.	Extending tunnel, etc., Ontario, Cal.		Mar. 23
Apr. 8.	Street railway, Home City, O.		Mar. 23
Apr. 8.	Crushed stone road, Lake Saranac, N. Y.		Apr. 6
Apr. 8.	Road rollers, Pittsburg, Pa.		Apr. 6
Apr. 8.	School bonds, ($25,000), Guttenberg, N. J.		Apr. 6
Apr. 10.	Town hall, Berkshire, Vt.		Apr. 6
Apr. 10.	Jail building, Oshkosh, Wis.		Apr. 6
Apr. 10.	Concrete dam, Los Angeles, Cal.		Apr. 6
Apr. 10.	Sewers, Providence, R. I.		Apr. 6
Apr. 10.	Garbage crematories, Houston, Tex.		Apr. 6
Apr. 10.	Water-works, Walker, Minn.		Apr. 6
Apr. 10.	Brick paving, Kokomo, Ind.		Apr. 6
Apr. 10.	Macadamizing & grading, Remington, Ind.		Apr. 6
Apr. 10.	Timber bulkheads, Boston, Mass.		Apr. 6
Apr. 10.	Bonds, Salem, O.		Mar. 23
Apr. 10.	Cement sidewalks, Crawfordsville, Ind.		Mar. 23
Apr. 10.	Gravel roads, Bedford, Ind.		Mar. 23
Apr. 10.	Asphalt paving, Lafayette, Ind.		Mar. 23
Apr. 10.	Brick paving, etc., Des Moines, Ia.		Mar. 23
Apr. 10.	Bridges (2), Chicago, Ill. Advertised, Engineering News, Feb. 23.		Feb. 23
Apr. 10.	Ditch, piling and rip-rap, Fremont, Neb.		Mar. 2
Apr. 10.	Arc lights, Dayton, O. Advertised, Eng. News, Mar. 2 and 9.		Mar. 2
Apr. 10.	Boilers for w.-wks (4), Montgomery, Ala. Advertised, Eng. News, Mar. 16 to Apr. 6.		Mar. 16
Apr. 10.	Sewerage system, Concord, Mass. Advertised, Engineering News, Mar. 30.		Mar. 30

Apr. 10. Water tank, Fort Mojave, Ariz. ..... Mar. 16
Apr. 10. Bridge metal tubes, Crescent City, Ill. ..... Mar. 30
Apr. 10. Street cleaning, etc., Washington, D.C. ..... Mar. 30
Advertised, Eng. News, Mar. 30 and Apr. 6.
Apr. 10. Public school building, Brooklyn, N. Y. ..... Mar. 30
Apr. 10. Street sprinkling, Washington, D. C. ..... Mar. 30
Advertised, Eng. News, Mar. 30 and Apr. 6.
Apr. 10. Macadam paving, Morristown, N. J. ..... Mar. 30
Apr. 10. Brick paving, South Bend, Ind. ..... Mar. 30
Apr. 10. Asphalt paving, Wabash, Ind. ..... Mar. 30
Apr. 11. Steam tug, New York, N. Y. ..... Mar. 30
Apr. 11. Pumping engines (2), Philadelphia, Pa. ..... Mar. 9
Apr. 11. Paving, etc., Huntington, Ind. ..... Mar. 9
Apr. 11. Brick paving, Schenectady, N. Y. ..... Mar. 23
Apr. 11. Jail cells, Anaconda, Mont. ..... Mar. 23
Apr. 11. Brick gutters, etc., Woodbury, N. J. ..... Apr. 6
Apr. 11. Brick paving, Gloversville, N. Y. ..... Apr. 6
Apr. 11. Bridge substructure work, Buffalo, N.Y. ..... Apr. 6
Apr. 12. Court house, Wayne, Neb. ..... Apr. 6
Apr. 12. Public building, Georgetown, Ky. ..... Apr. 6
Apr. 12. Court house, Red Lodge, Mont. ..... Apr. 6
Apr. 12. Paving material, etc., Baltimore, Md. ..... Apr. 6
Apr. 12. Lighting fixtures, Pottsville, Pa. ..... Apr. 6
Apr. 12. Paving, Salem, O. ..... Mar. 23
Apr. 12. Water-works, Mankato, Kan. ..... Mar. 23
Apr. 12. Maps and plats, Pomeroy, O. ..... Mar. 9
Apr. 12. Dam and weirs, Cincinnati, O. ..... Mar. 16
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 12. Additions water-works, Seattle, Wash. ..... Mar. 16
Advertised, Eng. News, Mar. 16 and 23.
Apr. 12. Brick and iron sewers, etc., Jersey City. ..... Mar. 30
Apr. 12. Steel bridge, Batavia, O. ..... Mar. 30
Apr. 12. Iron wire (1,000 miles), Washington, D.C. ..... Mar. 30
Apr. 12. Water pipe, Canton, N. Y. ..... Mar. 30
Apr. 13. Steel highway bridge, Providence, R. I. ..... Mar. 30
Advertised, Eng. News, Mar. 30 and Apr. 6.
Apr. 13. Steam heating, Athens, W. Va. ..... Mar. 30
Apr. 13. Steam heating, Fairmount, W. Va. ..... Mar. 30
Apr. 13. Lock house, Kanawha City, W. Va. ..... Mar. 30
Apr. 13. Repairing dredge, Charleston, S. C. ..... Mar. 30
Apr. 13. Roads (67 miles), Crown Point, Ind. ..... Mar. 30
Advertised, Engineering News, Mar. 30.
Apr. 13. Steam heating plant, Grand Junction, Colo. Mar. 23
Apr. 13. Steam heating, St. Paul, Minn. ..... Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 13. Hydraulic canal, Great Bend, N. Y. ..... Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 13. Water pipe, Chicago, Ill. ..... Apr. 6
Apr. 13. Sewers, North Braddock, Pa. ..... Apr. 6
Advertised, Engineering News, Apr. 6.
Apr. 13. Macadamizing three roads, Newark, N.J. ..... Apr. 6
Apr. 13. Brick paving, and sewers, Meadville, Pa. ..... Apr. 6
Apr. 14. Sewers, Independence, Mo. ..... Apr. 6
Apr. 14. Sewer pipe, etc., Minneapolis, Minn. ..... Apr. 6
Apr. 14. Brick paving, etc., Waukesha, Wis. ..... Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 14. Heating, etc., Louisville, Ky. ..... Mar. 16
Apr. 14. Hall building, Bradford, England. ..... Jan. 19
Apr. 14. Brick and steel sewers, Ottawa, Ont. ..... Mar. 30
Apr. 15. Paving (14,800 yds.), Petersburg, Va. ..... Mar. 30
Advertised, Engineering News, Mar. 30.
Apr. 15. Hospital buildings, Harrisburg, Pa. ..... Mar. 30
Apr. 15. Apartment building, Osage, Ia. ..... Mar. 30
Apr. 15. Steel bridge & abutments, Gainesville, N.Y. Mar. 30
Apr. 15. Water-works, Tinley Park, Ill. ..... Mar. 30
Apr. 15. Water-works, Hintonburg, Ont. ..... Mar. 30
Advertised, Engineering News, Mar. 30.
Apr. 15. Paving and sewers, Goshen, Ind. ..... Mar. 30
Apr. 15. Highway, Colden, N. Y. ..... Mar. 30
Apr. 15. Brick paving, Shamokin, Pa ..... Mar. 30
Apr. 15. Cotton mills, Greensboro, N. C. ..... Mar. 30
Apr. 15. Sewer material, etc., Honolulu, H. I. ..... Feb. 23
Advertised, Eng. News, Feb. 23 and Mar. 2.
Apr. 15. Hospital building, Birmingham, Ala. ..... Mar. 9
Apr. 15. Water-works, Forestport, N. Y. ..... Mar. 9
Apr. 15. Branch sewer, Sandusky, O. ..... Mar. 16
Apr. 15. Sewers, etc., Carrollton, Mo. ..... Mar. 16
Apr. 15. Water-works, Golden, Colo. ..... Mar. 16
Apr. 15. Paving, etc., and bonds, Carrollton, Mo. ..... Mar. 16
Apr. 15. Pumping engine, Montgomery, Ala. ..... Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 13.
Apr. 15. Paving, Akron, O. ..... Mar. 23
Apr. 15. Bridge, Hartford, Conn. ..... Mar. 23
Advertised, Eng. News, Mar. 23 and 30.
Apr. 15. Ditch (30,000 cu.yds.), Wapakoneta, O. ..... Mar. 23
Apr. 15. Paving, and curbing, Jamestown, N.Y. ..... Apr. 6
Apr. 15. Macadamizing, Lees Summit, Mo. ..... Apr. 6
Apr. 17. Light plant bonds, St. Paris, O. ..... Apr. 6
Apr. 17. Electric plant, Winnipeg, Man. ..... Apr. 6
Apr. 17. Garbage crematory, Louisville, Ky. ..... Mar. 23
Apr. 17. Water-works, Lakeport, Cal. ..... Mar. 23
Advertised, Engineering News, Mar. 23.
Apr. 17. Electric light franchise, Napa, Cal. ..... Mar. 23
Apr. 17. Paving, Bridgeport, O. ..... Mar. 23
Apr. 17. Brick paving, Toledo, O. ..... Mar. 23
Apr. 17. Macadam roads, Risingsun, Ind. ..... Mar. 23
Apr. 17. Brick paving, Portland, Ind. ..... Mar. 23
Apr. 17. Cement, stone, etc., Marquette, Mich. ..... Mar. 23
Advertised, Eng. News, Mar. 23 to Apr. 13.
Apr. 17. Levee (11 miles), West Memphis, Tenn. ..... Mar. 16
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 17. Public building work, San Francisco, Cal. ..... Mar. 16
Apr. 17. Municipal building, North Braddock, Pa. ..... Mar. 30
Apr. 17. Lumber, iron, etc., Portland, Me. ..... Mar. 30
Apr. 17. Water and electric bonds, Monroe, La. ..... Mar. 30
Apr. 17. Water mains, Goshen, Ind. ..... Mar. 30
Apr. 18. School buildings, etc., San Carlos, Ariz. ..... Mar. 30
Apr. 18. Trunk sewer, Bayonne, N. J. ..... Mar. 30
Apr. 18. Sewers, etc., San Carlos Agency, Ariz. ..... Mar. 30
Apr. 18. Arch culverts, Chicago, Ill. ..... Mar. 16
Advertised, Eng. News, Mar. 16 to Apr. 6.
Apr. 18. Pipe culverts (9), Chicago, Ill. ..... Mar. 23
Apr. 18. Paving, grading, etc., Jersey City, N.J. ..... Apr. 6
Apr. 18. Court house, Madison, Minn. ..... Apr. 6
Apr. 18. Electric plant, Carthage, Mo. ..... Apr. 6
Apr. 18. Grading and brick paving, Mt. Vernon, N.Y. ..... Apr. 6
Apr. 18. Grading and paving, St. Louis, Mo. ..... Apr. 6
Apr. 18. Macadamizing, Hammond, Ind. ..... Apr. 6
Apr. 19. Court house plans, Nashua, N. H. ..... Mar. 30
Apr. 19. Extending water-works, Butte, Mont. ..... Mar. 30
Advertised, Eng. News, Mar. 16 and 30.
Apr. 20. Electric plant, Genoa, Neb. ..... Mar. 30
Apr. 20. Air cylinders, etc., Montgomery, Ala. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 20.
Apr. 20. Water-works, etc., Greenville, Cal. ..... Mar. 30
Apr. 20. Excavating, New Orleans, La. ..... Mar. 23
Apr. 20. Asylum building, Whitehall, Wis. ..... Apr. 6
Apr. 20. Electric plant, Peterboro, England. ..... Apr. 6
Apr. 21. Street work (30 streets), St. Louis, Mo. ..... Apr. 6
Apr. 22. Race track, Nazareth, Pa. ..... Apr. 6
Apr. 22. Electric lighting, Jeffersonville, Ind. ..... Apr. 6
Apr. 22. Cement walk, Irvington, Ind. ..... Apr. 6
Apr. 23. Electric plant, Port Louis, Mauritus ..... Apr. 6
Apr. 23. Steel bridge, Raleigh, N. C. ..... Mar. 23
Apr. 24. Dredging harbor, New York, N. Y. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 20.
Apr. 24. School building, Euclid, O. ..... Apr. 6
Apr. 24. Two iron bridges, Huntington, W. Va. ..... Apr. 6
Apr. 25. Church building, Woonsocket, R. I. ..... Apr. 6
Apr. 25. Road improvement, Bondhill, O. ..... Apr. 6
Apr. 25. Park bonds, Cleveland, O. ..... Mar. 23
Apr. 26. Dormitory buildings, Poplar, Mont. ..... Mar. 30
Apr. 26. Dredging two channels, New York ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 20.
Apr. 26. Water-works, etc., Fort Peck, Mont. ..... Mar. 30
Apr. 26. Dredging harbor, Cleveland, O. ..... Mar. 30
Advertised, Eng. News, Mar. 30 and Apr. 6.
Apr. 27. Sewer system, Tybee Island, Ga. ..... Apr. 6
Apr. 27. Pier of aqueduct bridge, Georgetown, D.C. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 20.
Apr. 28. Water tanks, etc., Pipestone, Minn. ..... Apr. 6
Apr. 28. Broken stone, New York, N. Y. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 20.
Apr. 28. Reservoir, Cincinnati, O. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 27.
Apr. 28. Water mains, Cincinnati, O. ..... Mar. 30
Advertised, Eng. News, Mar. 30 to Apr. 27.
Apr. 29. Building plans, New Haven, Conn. ..... Mar. 23
May 1. Bonds, Cobourg, Ont. ..... Mar. 30
May 1. Electric and water plant, Cullman, Ala. ..... Mar. 30
May 1. Rip-rap embankment, Two Harbors, Minn. ..... Apr. 6
Advertised, Eng. News, Apr. 6 to 26.
May 2. Electric lighting, Perth, W. Australia. ..... Apr. 6
May 2. Dredging, Wallabout channel, New York ..... Apr. 6
Advertised, Eng. News, Apr. 6 to 26.
May 3. Dredging, Gowanus Creek, New York ..... Apr. 6
Advertised, Eng. News, Apr. 6 to 26.
May 3. Sewerage system, Sauk Centre, Minn. ..... Mar. 30
Advertised, Eng. News, Mar. 30 and Apr. 6.
May 9. Feeder canal (13 miles), Tampico, Ill. ..... Apr. 6
Advertised, Eng. News, Apr. 6 to May 3.
May 15. Sewers, Medford, Ore. ..... Mar. 30
May 25. Sewer system, Johannesburg, S. Africa ..... Mar. 9
May 31. Plate-girder railway bridge, Joliet, Ill. ..... Apr. 6
May 31. Armor plate, Washington, D. C. ..... Apr. 6
June 1. Plans for market, Leeds, England. ..... Feb. 16
June 30. Electric ry. (23 miles), Shanghai, China. Mar. 2
Advertised, Eng. News, Nov. 17 to Dec. 8.
Oct. 1. Electric street railway, Moscow, Russia. ..... Mar. 9
No date. Water-works, Napoleonville, La. ..... Apr. 6

RAILWAYS.

ARKANSAS & OKLAHOMA.—Surveys are about to begin, according to reports, for an extension of this line about 60 miles to the northwest of Gravatt, Ark. The grading is light and has been done by the company. One 600-ft. bridge will be required. F. M. Bayliss, Pres., Cassville, Mo.; Frank Koresky, Ch. Engr.

ARKANSAS & LOUISIANA.—Mike Tansey is reported to have received the contract for constructing 18 miles of roadbed for this company from Sibley Junction southeasterly through Bienville parish. J. D. Moore, Supt., Little Rock, Ark.

ATLANTA, KNOXVILLE & NORTHERN.—Surveys are to be made by John B. Newton for extensions of this system from Marietta to Atlanta and from Marietta to Austell. Jos. McWilliams, Gen. Mgr., Marietta, Ga.

BOGUE, PHALIA & SUNFLOWER.—This company has been organized by Edmund Taylor, W. H. Everman and others, of Greenville, Miss., for the construction of a standard gage line from Swan's Station, on the Southern Ry., 25 miles to the Sunflower River.

BRAINERD & NORTHERN MINNESOTA.—O. O. Winter, Gen. Mgr., Brainerd, Minn., informs us that this company has simply made preliminary surveys for the proposed extension from Bemidji north 15 to 18 miles to pine forests, and that construction has not yet been positively decided upon. C. A. Pillsbury, Pres., Minneapolis, Minn.; W. C. Smith, Locating Engr., Brainerd.

BURLINGTON, CEDAR RAPIDS & NORTHERN.—We are informed that the contract held by the Flick & Johnson Construction Co., Davenport, Ia., for work on this railway near Cedar Rapids, Ia., consists merely in the straightening of the main line for a distance of 3,700 ft., requiring but 12,000 cu. yds. of earth excavation and 24,000 cu. yds. of rock excavation.

CALVERT & BRAZOS.—This company has been organized at Calvert, Tex., to build a line from Calvert, on the Houston & Texas Central R. R., to Hearne & Brazos Valley Junction, a station on the International & Great Northern R. R. ten miles distant. The Hearne & Brazos Valley R. R. extends south from the junction to Stowe City, about 17 miles, and it is said to have been bought by the Huntington (Houston & Texas Central) interests.

CAPE OF GOOD HOPE.—Bids are asked by the Controller and Auditor-General of this colony until April 17 for constructing a light or ordinary railway, with or without permanent way materials and bridgework, from Sir Lowry Pass Station to Caledon, about 53 miles.

CATSKILL & TANNERSVILLE.—We are informed that the Mohawk Contracting Co., 32 Broadway, New York, has been awarded the contract for the construction of a four-mile extension of this railway from Otis Summit, N. Y.

CHICAGO, MILWAUKEE & ST. PAUL.—McIntosh Bros., 503 Pabst Bldg., Milwaukee, Wis., are reported to have received the contract for leveling and straightening the track on the La Crosse division between North Milwaukee and Portage, Wis., requiring about 1,000,000 cu. yds. of earth excavation and considerable raising of grade. Most of the work will be done near Columbus, and it is expected to employ from 600 to 800 men and 200 teams all summer, so as to complete the improvements before Oct. 1. The proposed double-tracking on the La Crosse division will not be undertaken this year. D. J. Whittemore, Ch. Engr., Chicago, Ill.

CHOCTAW, OKLAHOMA & GULF.—F. A. Molitor, Ch. Engr., Little Rock, Ark., informs us that the reconstruction of the Memphis division of this system between Little Rock, Ark., and Memphis, formerly the Little Rock & Memphis R. R., has been commenced, and consists of the entire renewal of the White and St. Francis River spans, reduction of the Forest City grade, the relaying of 50 miles of new steel, the widening of banks and the raising of tracks throughout. The contract for the grading has been given to R. L. Van Sant, St. Louis, Mo.

COAST RY. OF NOVA SCOTIA.—H. J. Townsend & Co., New Glasgow, N. S., are reported to have completed 17 miles of grading on the proposed extension of this line from East Pubnico towards Lockeport, N. S., 66 miles. Further extensions from Lockeport to Halifax are projected, and new contracts for this work will probably be let this summer. L. H. Wheaton, Ch. Engr. and Supt., Yarmouth, N. S.

COLUMBUS & NORTHERN.—This company has been organized by Andrew O. Bailey, A. J. Clark and others, of New Mexico, to build from Columbus, N. Mex., through Colorado to Salt Lake City, Utah.

CRIPPLE CREEK.—Incorporated in Arizona, with $2,000,000 capital stock, to build a line from Canon City, Colo., to the Cripple Creek mining district. The incorporators are said to be Samuel M. Richardson, Wm. L. Kiefer and Albert T. Sharp, of New York.

CUMBERLAND VALLEY.—John Dobbling, York, Pa., is said to have received the contract for constructing a nine-mile feeder to the Cumberland Valley R. R., from Dillsburg to York Springs, Pa. Work is to be completed in 90 working days.

DULUTH & NEW ORLEANS.—Final arrangements are being made, according to reports, for constructing this line from Des Moines to Nevada, Ia., 30 miles, with a projected extension to the Winona & Western Ry. at Osage. S. V. Wardall, Secy., Ames, Ia.

ENGLAND.—Bids are asked until April 18 for the widening of the line between Llanhilleth and Aberbeeg, about 1.37 miles, for the Great Western Ry. Co. Address G. K. Mills, Secy., Paddington Station, London, England.
—Bids are asked until April 19 for constructing a double-track line of railway, 9.11 miles in length, between Seaham Harbor and Hart Station, near Hartpool, for the North-Eastern Ry. Co. Address the secretary, York, England.

GREAT NORTHERN OF CANADA.—Ross, Barry & McRae, Toronto, Ont., are reported to have received the sub-contract for the construction of an extension of this line to Quebec. P. Garneau, Pres., Quebec, Que.

INDIA.—Bids are asked until April 13 for supplying composite bogie saloon carriages for the Indian Midland Ry. Co., according to reports. Address the secretary, Copthall House, 48 Copthall Ave., London, E. C., England.

IRELAND.—Bids are asked until May 1 for the construction of about 14 miles of railway in the county of Kilkenny for the Dublin, Wicklow & Wexford Ry. Co. M. F. Keogh, Secy., Dublin, Ireland.

KANE.—Incorporated in Pennsylvania, April 3, with a capital stock of $110,000, to build a steam railway between Mount Jewett and a connection with the Pittsburg & Eastern R. R. at Kane, Pa. Elisha K. Kane, Pres., Kushequa, Pa.; H. W. Sweely and B. N. McCoy, of Kane, are incorporators.

MARBLEHEAD, PORT CLINTON & SOUTHERN.—Incorporated in Ohio, March 29, with $100,000 capital stock, to build from Tiffin to Marblehead, via Seneca, Sandusky and Ottawa counties. O. W. E. Guerin, Jr., Sandusky, O., and W. E. Bense, Port Clinton, O., are incorporators.

MINERAL RANGE.—H. J. Payne, Ch. Engr., Marquette, Mich., informs us that Balch & Peppard, Minneapolis, Minn., who began the construction of this line from Arcadian Mine to Grosse Point, Mich., 12 miles, last fall, expect to complete it in time for operation by July 1. W. F. Fitch, Pres., Marquette.

MOUNT JEWETT, CLERMONT & NORTHERN.—Reports state that this line will soon be extended from its present terminus at Marvindale to Smithport, Pa. A. G. McCombe, Ch. Engr., Bradford, Pa.

NORTH & SOUTH CAROLINA.—The stockholders of this company have authorized the directors to undertake immediately the construction of the first section of this line from Virgilina, Va., southward. Col. H. S. Haines, Pres.; Adam Tredwell, Secy. and Treas., with offices at Norfolk, Va.

ONTARIO.—The legislature of Ontario is considering proposals for pushing railway communication into the northern parts of the province. It is proposed to grant a subsidy of $480,000 and 5,000 acres a mile for a line of railway connecting with the Canadian Pacific Ry. at Missanabne station to Moose River on James Bay. This will form the westerly route to Hudson Bay. It is proposed to grant $250,000, together with a land grant, to the James Bay Ry., which, starting near Sudbury, will end at Lake Abittibi, thus making an easterly trunk line to Hudson Bay. These railways, it is understood, will open valuable agricultural and mining lands.

PARRAL & DURANGO.—The Jolly Bros., Pittsburg, Pa., are reported to have received the contract for grading and track-laying on this proposed line from Parral to Durango, Mexico, 50 miles. The Shiffler Bridge Co., Pittsburg, will erect the bridges; Dilworth, Porter & Co., Pittsburg, will supply the tie-plates, spikes and rail fastenings; and the Colorado Fuel & Iron Co., Pueblo, Colo., will furnish the rails.

PITTSBURG, MONONGAHELA & WHEELING.—Reports state that this company, incorporated five years ago, is again negotiating for the construction of a line from the terminus of the Pittsburg, McKeesport & Bellevernon R. R., near Brownsville, Pa., to Bentleyville and Wheeling. Surveys have been made by Wilkins & Davidson, Pittsburg. The new road is essential to the development of coal fields recently acquired by a syndicate. Willis L. McCook, Pittsburg, and R. C. Broadbent, Philadelphia, Pa., are said to be interested.

ST. JOSEPH SWITCH & TRANSFER.—Incorporated with $50,000 to build five miles of standard gage railway in St. Joseph, Mo. W. B. Johnson and John A. Duncan are incorporators.

SOUTHERN.—It is announced that this company is about to extend its lines from Columbia, S. C., to Savannah, Ga., and ultimately to Jacksonville, Fla. This extension is rendered necessary by the Seaboard Air Line's recent purchase of the Florida Central & Peninsular, which runs from Columbia to Savannah, Jacksonville and Tampa, Fla. W. H. Wells, Ch. Engr., Washington, D. C.

TENNESSEE.—Reports from Jonesboro, Tenn., state that surveys are now being made for 12 miles of new narrow-gage railway from Red Bank, on the Chucky River, to Flag Pond, Tenn., for the J. M. Buck Lumber Co. and Wm. E. Uptergrove & Bro.

TEXARKANA & SHREVEPORT.—Reports from Shreveport, La., state that Hunter Bros. have been awarded the contract for grading 20 miles of roadbed from Shreveport north to a terminus of the present line.

UNION PACIFIC.—We are informed that Kilpatrick Bros. & Collins, Beatrice, Neb., have been awarded the contract for building three cut-offs in Wyoming, involving the construction of 47 miles of new road at a cost of $30,000 a mile. Grading is to be completed by Nov. 1.

STREET AND ELECTRIC RAILWAYS.

ROCKLAND, ME.—The Rockland, Thomaston & Camden St. Ry. Co. is considering the advisability of extending its lines from Rockland to South Thomaston and from Thomaston to Warren. Geo. E. Macomber, Pres.

BOSTON, MASS.—Reports state that E. Rollins Morse & Bro. and Tucker, Anthony & Co., brokers, of this city, have purchased all the assets of the North Shore Traction Co., including the stock of the Lynn & Boston R. R. and the Beverly & Danvers St. Ry. companies, for $258,800.

LINWOOD, MASS.—The Linwood St. Ry. Co. has been granted a franchise to build between Linwood and Whitinsville, and the line will be opened during the coming summer. Connections will be made at Whitinsville with the Worcester & Blackstone Valley Electric Ry., and will give a through line of 18 miles to Worcester.

MIDDLEBORO, MASS.—The Taunton & East Taunton Ry. Co. has been granted a franchise to extend its lines from East Taunton to Middleboro. M. A. Cavanaugh, Pres., Taunton, Mass.

MILFORD, MASS.—Wm. H. Tylee & Co., Worcester, Mass., have been awarded the contract for constructing 23 miles of line for the Milford, Attleboro & Woonsocket Electric Ry. Co., according to reports.

NEWBURYPORT, MASS.—The Newburyport & Amesbury Horse R. R. was sold at auction, March 28, to E. P. Shaw, Newburyport, for $190,000.

DUNKIRK, N. Y.—The council granted a franchise March 31 to Daniel F. Toomey and others to build a trolley line to Hickoryhurst.

LARCHMONT, N. Y.—The Larchmont Horse Ry. Co., operating 1¼ miles of railway in this village, has applied for franchises to enable it to build from the Larchmont railway station through Mamaroneck to Harrison, about six miles. The Larchmont Manor trustees will give a public hearing on April 22. W. H. Campbell, Treas.

PELHAM, N. Y.—Highway Commissioner Donlan has granted a franchise to the New York, Westchester & Connecticut Traction Co. to build through this town to Bartow.

KITTANNING, PA.—A. B. Norton, Ch. Engr., Kittanning, informs us that work is well under way on the proposed Kittanning & Ford City Electric Ry. from Nealton to Ford City, via Kittanning and Manorville, six miles; three miles of which will be completed by May. The contract is held by the Altoona Electrical Engineering & Supply Co., Altoona, Pa. F. A. Moesta, Pres.

MONONGAHELA, PA.—The Monongahela City St. Ry. Co. contemplates extending its line from Black Diamond to Courtney. S. M. Downer, Pres.

NAZARETH, PA.—The Wind Gap & Nazareth St. Ry. Co. was incorporated, April 3, with a capital stock of $60,000, to build an electric railway from Nazareth to Wind Gap, Northampton county. M. P. McGrath, Pres., Worcester, Miss.; Chas. H. Cox, Bethlehem, Pa., and Thos. A. H. Hay, Easton, are incorporators.

NEW KENSINGTON, PA.—John Guffey, M. C. Dwyer and others, incorporators of the Creighton, Tarentum & New Kensington St. Ry. Co., have petitioned the council of this city for a franchise to build a line to Tarentum, to connect there with the Tarentum St. Ry. extended

TRAPPE, PA.—The Trappe & Limerick Square Ry. Co. was incorporated, April 3, with $30,000 capital stock, to build between Collegeville to Limerick, Montgomery county. John G. MacPherson, Pres.; Wm. J. Leahy and John M. Emery, all of Philadelphia, Pa., are incorporators.

CENTREVILLE, MD.—T. J. Johnson, Cleveland, O., and J. C. D. Davis and H. C. Carruth, St. Michaels, Md., are said to be interested in a project to construct an electric railway from this place to Easton, via St. Michaels, 70 miles.

WASHINGTON, D. C.—The installation of the underground electric system on the City & Suburban Ry., from 15th to G Sts., is progressing rapidly. Work will soon be commenced on the northeast branch.——The placing of conductor rails for the new electric system on the Columbia Ry., to replace the cable line, has begun on the main portion of the line.

PORTSMOUTH, VA.—Surveys are being made for street grading, and for extending the street railway through property of the Portsmouth Land Co. V. O. Cassell, County Engr.

AKRON, O.—The property of the Akron St. Ry. & Illuminating Co. was sold, March 28, to the Akron Traction & Electric Co., for $1,050,000. It is said the entire system of railways, about 20 miles, will be double-tracked. Geo. W. Cruse, Pres., 80 Broadway, New York; F. A. Seiberling, Vice-Pres., Akron.

CLEVELAND, O.—The Cleveland, Wadsworth & Southern Electric Ry. Co. has been granted a franchise to build 6½ miles of line in Cuyahoga county; work must begin before April 1, 1900. J. K. Pierson, Promoter.—— The stockholders of the Lorain & Cleveland Ry. Co. have decided to extend seven miles to South Amherst this summer. B. Mahler, Pres., Cleveland.

COLUMBUS, O.—The commissioners of Franklin county granted a franchise, March 29, to the Columbus & Buckeye Lake Electric St. Ry. Co. Work must begin by April 15, and cars be running to Reynoldsburg by Oct. 1.

NILES, O.—Reports state that the Mineral Ridge & Niles St. Ry., five miles in length, was sold by D. D. Moynahan, March 28, to the Mahoning Valley Ry. Co., of Youngstown, O., operating a line between Warren, Niles and Youngstown.

CAMBRIDGE CITY, IND.—Kenney & Kepler, Cambridge City, proprietors of the Cambridge City Interurban Traction Co., inform us that they have secured part of the right of way for this proposed line from Cambridge City to Economy, via Milton, Mount Auburn, Dublin and Hagerstown, 25 miles. Bonds will be issued for part of the road, and contracts will be let in about 60 days.

SOUTH BEND, IND.—Francis Torrence, Pittsburg, Pa.; W. L. Stones, Goshen, Ind., and others, have incorporated a company, with $1,000,000 capital stock, to control the old South Bend St. Ry., the General Power & Quick Transit, the South Bend & Elkhart, the Indiana Electric and the Elkhart, Goshen & Southern companies.

DETROIT, MICH.—The Michigan legislature has passed a bill providing for the municipal ownership of street railways in this city.

BURLINGTON, IA.—The Burlington Ry. & Light Co. is negotiating with the council for the right to extend its lines to West Burlington.

DAVENPORT, IA.—G. W. Koontz, S. W. Mercer and Stephen Bradley, of Iowa City, Ia., contemplate the construction of an electric street railway in this city, according to reports.

SIOUX CITY, IA.—The Sioux City Traction Co. is a new corporation formed to control the local traction companies. J. S. Lawrence, Pres.

KANSAS CITY, KAN.—The Kansas City & Leavenworth Ry. Co. was incorporated, March 30, with $1,000,000 capital stock, to build a railway between Kansas City and Leavenworth, via Conner and Lansing, Kan., to be operated by electricity or compressed air. Henry W. Wolcott, Cleveland, O., and W. E. Winner, Lansing, Kan., are directors.

KANSAS CITY, MO.—The Central Electric St. Ry. Co. was incorporated, March 29, with $2,500,000 capital stock, by Daniel B. Holmes and others. It is proposed to buy out and consolidate the Northeast Electric Ry. and the Brooklyn Ave. Cable line.

WELLSTON, MO.—M. T. Chestnut, St. Louis, Mo., has applied to the St. Louis county court for a 50-year franchise to operate an electric street railway between this place and Jefferson Barracks.

EIBENSTOCK, GERMANY.—Ernest L. Harris, U. S. Consular Agent at Eibenstock, reports that the following cities in Germany are planning the immediate construction of electric plants and electric street railways: Pforzheim, Trier, Ratisbon, Colmar, Jena, Kaiserslautern and Worms. In Meissen, Weimer and Eisleben lines are being built.

ELECTRIC LIGHT AND POWER.

WATERVILLE, ME.—The Union Gas & Electric Co., local papers state, will soon begin the work of completing its dam on the lower Messalonskie River, and for the construction of the power house.

MARSHFIELD, VT.—M. E. Buhley, Marshfield, writes us that efforts are being made to form the Marshfield Electric Power & Light Co., to build a plant at Molley's Falls, to cost $5,000. There will be required five miles of main wire to transmit power to two villages. The water will have a fall of 207 ft. in 1,500 ft. There will also be wanted 8 or 10-in. pipe.

ATHOL, MASS.—L. S. Starrett has purchased the interest of W. G. Bennett, of Bennett & Van Valkenburg, which gives him the ownership of two-thirds of the water power at the Starrett factory.

HARTFORD, CONN.—The Housatonic Power Co. proposes to build a power dam across the Housatonic at Zoar Bridge, five miles above Derby. Zoar Bridge is below the swiftest running part of the river, and is only slightly more elevated than Derby. It is proposed to generate electricity enough to be conveyed to Derby, Ansonia, New Haven, Bridgeport, Waterbury, Naugatuck, Danbury and New Milford.

EAST HARTFORD, CONN.—We are informed that A. W. Wickham, E. E. King, E. W. Pratt and W. G. Comstock, Jr., are on a committee to secure legislation to secure the municipal control of electric distribution, water-works and sewerage systems.

ALBANY, N. Y.—The senate has passed Senator Higgin's bill appropriating $60,000 for a state electric plant.

ALBION, N. Y.—The Niagara Electric Co., Niagara Falls, N.Y., is reported to have been awarded the contract for constructing a power station and transmission line and to furnish the necessary machinery for the new plant of the Albion Power Co. W. C. Johnson, Engr.

CHATEAUGAY, N. Y.—J. Ovette Smith, Plattsburg, N. Y., is said to have been granted a franchise.

EAST SYRACUSE, N. Y.—It is stated that this place has voted to own its plant.

KINGSTON, N. Y.—The Honk Falls Power Co. has been granted permission to string wires through Hurley, Rochester and Wawarsing. Permission to extend wires in other towns has been asked.

POTSDAM, N. Y.—This town voted informally March 21 in favor of purchasing the W. W. Weed water power. A formal vote will be taken April 11.

RENSSELAER, N. Y.—The Rensselaer & Columbia Electric Power & Water Co. is surveying along the Kinderhook Creek. It is looking up and surveying all the feasible water powers along the creek.

GLASSBORO, N. J.—It is proposed to appropriate $12,000 for a plant and water-works.

BRIDGEPORT, PA.—A. J. Hennington, Burgess, writes us that no action has yet been taken in regard to a municipal plant. The Pennsylvania Globe & Gas Light Co. now supplies the town with light.

DANVILLE, PA.—An election will be held April 25 to vote on the question of issuing $15,000 in bonds for a plant.

POTTSVILLE, PA.—Bids are asked until April 12 for certain combination gas and electric light fixtures for the U. S. public building. H. A. Taylor, Asst. Secy. Treasury Dept., Washington.

YORK, PA.—The Edison Electric Light Co. has secured $350,000 on a mortgage from W. J. Hays & Son, Cleveland and Boston, by which it is proposed to increase the capacity of the plant.

EMPORIA, VA.—Col. C. P. E. Burgoyne has made a survey for a plant on the Meherrin River.

HOUSTON, VA.—R. Holt Easley, Mgr. Banister-Dan Mills Co., writes us that the company owns a large water power on the Dan River ten miles below South Boston, Va. The company expects before long to develop this power and transmit it by electrical current to South Boston for both lighting and power purposes, but so far has not formulated plan to this end, and likely will not for some months.

PULASKI, VA.—John T. Loving, Mayor, writes us that the town has not yet employed an engineer to prepare plans for a plant, but it is expected that the council will do so soon. The plant will have a capacity for 50 2,000-c. p. arc and 500 16-c. p. incandescent lights.

TAZEWELL, VA.—Spotts Bros., of Tazewell, and John Spotts, of Staunton, Va., have been granted a franchise, according to reports. The plant will be in operation in 10 months. A franchise from Kelly has also been asked.

HUNTSVILLE, ALA.—T. W. Pratt writes us a plant to cost $80,000 will be built by the electric railway company.

SCRANTON, MISS.—Chas. I. Friar, Supt., writes us that it is not proposed to increase the plant until the autumn. At that time it is proposed to put in two 40 or 50-K-W. generators.

SUMMIT, MISS.—It is stated that a contract for building a plant will soon be let.

ROCKWOOD, TENN.—D. M. Coffman has asked for a 40-year franchise for a plant and water-works.

AKRON, O.—The property of the Akron St. Ry. & Illuminating Co. was sold March 28 to the reorganization committee, represented by Attorney J. H. Dempsey, of Cleveland. The price paid was $1,050,000. This is subject to an underlying issue of bonds amounting to $200,000. The appraised value of the property was $695,500. The Akron Traction & Electrical Co. will be organized with a capital of $2,000,000 to take the property. General Sam'l Thomas, of New York, will be the head of the company, but Geo. W. Crouse, of this city, will be the President; F. A. Seiberling, Vice-President; L. C. Miles, Secretary, and A. Wagoner, Treasurer.

ST. PARIS, O.—Bids are asked by the city clerk until April 17 for the purchase of $8,000 of 6% bonds for building the plant. The Hays Construction Co., Troy, O., will prepare the plans.

ALBANY IND.—The Seckner Contracting Co., The Rookery, Chicago, has been awarded the contract at about $32,000 for putting in the plant and water-works for the Albany Water & Light Co., recently incorporated with a capital stock of $5,000.

BLOOMFIELD, IND.—Plans for a plant and water-works have been prepared; estimated cost, $18,000. C. E. Henderson, Clk., writes us that an election will probably be held in May.

GAS CITY, IND.—J. M. Beavo, Cy. Engr., writes us that estimates are wanted for a new alternator, motors, wiring, etc., for the plant. It is also proposed to install a fire-alarm system.

JEFFERSONVILLE, IND.—Bids are asked until April 22 for lighting the city with electricity for 10 years. W. B. Hassen, Cy. Clk.

PENDLETON, IND.—The Seckner Contracting Co., The Rookery, Chicago, has been awarded the contract for building the plant and water-works for the Pendleton Water & Light Co.; cost, about $35,000.

SEYMOUR, IND.—It is proposed to build a plant and water-works, according to reports.

MANISTIQUE, MICH.—Benj. Gero, of the Manistique Light Co., writes us that bids are wanted about April 6 for constructing a plant. The company will purchase a 3,000-light alternator, water-wheel, governor, etc. The plant will have a capacity for furnishing 25 1,200-c. p. arc and 4,000 16-c. p. incandescent lights; capital stock, $20,000.

MARQUETTE, MICH.—The legislature has passed the bill authorizing this place to spend $10,000 for enlarging its plant.

VERMONT, ILL.—N. P. Pittenger, Village Clk., pro tem., writes us that a franchise for a plant has not yet been granted to Potter & Benson, 939 Monadnock Block, Chicago, as has been reported.

LA CROSSE, WIS.—The question of the municipal ownership of the plant is being considered.

MILWAUKEE, WIS.—A. M. Patitz, Arch., 1101 Pabst Bldg., writes us that bids will be wanted in April for a plant for the county court house, to cost $10,000. The work will consist of entire new system of direct heating for court house (estimated cost, $4,000), also installation of complete power plant, two boilers, two engines, two dynamos (direct connected), switchboard, etc., and wiring of building for 1,028 lights and one 15-HP. elevator motor. Further underground conduit to jail (three blocks away for 212 lights, and to Poor office and Morgue (seven blocks away), 160 lights. Also wiring for each building fixtures to be bought extra.

BURLINGTON, IA.—The Burlington Ry. & Light Co. will extend its lighting lines, etc.

MUSCATINE, IA.—H. W. Huttig, of this city, has purchased the plant of the Muscatine Electric Light & Power Co. It is stated about $60,000 will be spent in improving the plant.

SEYMOUR, IA.—This place voted March 27 to put in a plant to cost about $10,000. Councilmen W. A. Hackett and N. C. McNeal may be addressed.

VALLEY JUNCTION, IA.—This place voted March 27 to grant a franchise for a plant and water-works. E. H. English and J. F. Martin may be addressed.

STILLWATER, MINN.—The Lowry-Goodrich Electric Railway Co. and the Stillwater Gas & Electric Light Co. will unite in building a power house on the Florence mill property on lower Main St., according to reports.

ABERDEEN, S. DAK.—C. J. Hute, Mayor, writes us that the city proposes to purchase the plant of the Aberdeen Gas & Electric Light Co.

CARTHAGE, MO.—Bids are asked until April 18 for furnishing the material and for building a plant, to cost $25,000. C. O. Harrington, Mayor, writes us that the bonds have been sold. Owen Ford, Engr., 710 Security Bldg., St. Louis.

HAYS CITY, MO.—It is stated that the town expects to have a plant in operation in six months.

SANTA FE, N. MEX.—The following bids were received March 27 at the Indian office for constructing an electric light system at the U. S. Indian school, Santa Fe: Arthur Frantzen & Co., Chicago, $5,782; The Mountain Electric Co., Denver, Colo., $5,540; Brown Electrical Construction Co., New Haven, Conn., $10,475; Crocker-Wheeler Electric Co., $7,620 for plant complete; $6,02? for plant complete without wiring.

LOS ANGELES, CAL.—Bids are asked until April 10 for constructing a submerged concrete dam in the San Gabriel River for the San Gabriel Electric Co., 254 South Los Angeles St., Los Angeles.

MENDOCINO, CAL.—An election will soon be held to vote on the question of issuing $18,000 in bonds for a plant.

SANTA ANA, CAL.—The question of granting a franchise for a plant to a Los Angeles company has not been definitely decided by the trustees. It is rumored that Mr. Green, of Hotel Green, Pasadena, and Andrew McNally, of Chicago, are interested. The city is at present lighted by the Santa Ana Gas Co., which has no electric power.

WILLCOX, ARIZ.—F. E. Cadwell and T. D. Swatling have formed the Willcox Lighting, Pumping & Ice Co., and will erect a plant. There will be two 50-HP. boilers. The plant will consist of two dynamos and a direct 3-wire system.

WINNIPEG, MAN.—Bids are asked until April 17 for furnishing the materials and for constructing a complete plant. C. J. Brown, Cy. Clk.

PETERBORO, ENGLAND.—Bids are asked until April 20 for furnishing the machinery and for erecting a plant. John C. Gill, Municipal Offices, may be addressed.

GERMANY.—Ernest L. Harris, U. S. Consular Agent, Eibenstock, Germany, reports that a number of cities in Germany propose to build plants and electric railways, among which may be mentioned Pforzheim, Trier, Ratisbon, Colman, Jena, Worms, etc. The population of these cities range from 15,000 to 50,000 people.

PERTH, WESTERN AUSTRALIA.—Bids are asked until May 2 for the purchase of a concession for installing a plant and for lighting the public buildings and streets of Perth, as well as for private lighting. Address the Mayor, care of the Agent-Generals for Western Australia, 15 Victoria St., Westminster, London.

PORT LOUIS, MAURITIUS.—Bids are asked until April 23 for the purchase of a concession to furnish this city with electric lights. A deposit of £1 1s. is required. Maurice Ulcoq, Agent-General, 9 Idol Lane, E. C., London, England.

CONCORDIA, ARGENTINE.—The municipal authorities have contracted with Pablo Sabrega to put in a plant. The machinery is yet to be purchased.

BRIDGES.

BOSTON, MASS.—We are informed that the following bids were received by the city engineer March 27 for a retractile draw for the Malden bridge over the Mystic River: Pittsburg Bridge Co., $10,949; Youngstown Bridge Co., $11,050; Wrought Iron Bridge Co., $11,100; Penn Bridge Co., $11,189; Massillon Bridge Co., $11,210; King Bridge Co., $11,265; Toledo Bridge Co., $11,312; Boston Bridge Works, $11,400; New England Structural Co., $11,432; Groton Bridge & Mfg. Co., $11,500; New Jersey Steel & Iron Co., $11,630; Canton Bridge Co., $11,800; New Columbus Bridge Co., $12,120.

BUFFALO, N. Y.—It is reported that the Grand Island Bridge Co. will commence work on the proposed bridge to connect the island with the city, about June 30. Chas. D. Marshall, Pres.

WATERPORT, N. Y.—A contract has been awarded to the Horseheads Bridge Co., Horseheads, for a bridge at this place; appropriation, $14,000.

BUFFALO, N. Y.—Bids are asked by the grade crossing commission until April 11 for furnishing the material and for constructing masonry, paving and piers, abutments and approaches of a viaduct between Elk St. and Abbott Road. F. V. E. Bardol, Ch. Engr.

YATES, N. Y.—The town has voted to construct a bridge over Johnsons' Creek, at a cost of $1,250.

BRADFORD, PA.—The Erie R. R. Co. will commence the work of removing the Kinzua bridge April 15, and will erect a heavier structure in its place.

DOYLESTOWN, PA.—The county commissioners have received a petition from Plumstead township for a bridge over the North Branch, on the Durham Road.

MILANVILLE, PA.—The people of Damascus have appropriated about $15,000 for an iron bridge about 470 ft. long over the Delaware River at this place, according to reports.

PORT CLINTON, PA.—The Reading Ry. Co. has awarded a contract to the Pencoyd Iron Works, 261 South 4th St., Philadelphia, for one single track iron bridge 104 ft. long parallel with the existing bridge, and one double track iron bridge, 202 ft. long, between Port Clinton and Drehersville.

WASHINGTON, D. C.—The Pennsylvania R. R. Co. has decided to elevate its tracks in this city and to construct a $1,000,000 steel bridge over the Potomac River in place of the Long Bridge. It is estimated that about $5,000,000 will be spent in the improvements, which include a new station on the present site in the Mall.

HUNTINGTON, W. VA.—Bids are asked until April 24 for two iron bridges over creeks, according to reports. F. L. Doolittle, County Clk.

CHATTANOOGA, TENN.—The piers of the wooden bridge over Chattanooga Creek on the Chattanooga Southern R. R. have been damaged by high water.

PINEVILLE, KY.—The Pine St. bridge over the Cumberland River at this place has been carried away by high water. The structure was built by the county at a cost of $25,000.

ASHTABULA, O.—Reports state that the King Bridge Co., Cleveland, has been awarded a contract for replacing the steel bridge on the Lake Shore & Michigan Southern Ry., over the Ashtabula River.

INDIANAPOLIS, IND.—A committee of the Commercial Club is considering the question of having a stone bridge constructed over Fall Creek, at Meridian St. Estimates on several kinds of bridges will be obtained before presenting the matter to the board of public works and county commissioners.

INDIANAPOLIS, IND.—City Engineer Jeup is preparing plans for several concrete steel arch bridges with stone facing to cross Fall Creek between Central and Northwestern Aves.——The park board will let contracts about May 1 for three bridges for Pogue's Run Park. Address Engineer Power.

GRAND RAPIDS, MICH.—F. C. McMath, Asst. Engr. of the Detroit Bridge Works, has examined the bridge at Comstock Park with a view of strengthening it so as to run the street railway across to the fair grounds. A new bridge would cost about $12,000. C. C. Comstock is interested.

JOLIET, ILL.—Bids are asked by the board of sanitary district trustees, 1110 Security Bldg., Chicago, until May 31, for furnishing the material and for constructing a double track plate girder railway bridge of two spans of 78 ft. each.

URBANA, ILL.—On March 30 the following bids were received for highway bridges on masonry:

Bidder.	Span. 56-ft.	50-ft.	48-ft.
Indianapolis Bridge Co.	*$1,034	*$974	*$815
La Fayette Bridge Co.	1,050	980	855
Massillon Bridge Co.	1,070	1,000	900
New Castle Bridge Co.	1,128	1,053	865
W. T. S. Hunt Bridge Co.	1,178	1,125	965
Bellefontaine Br. & Iron Co.	1,250	1,183	917
Kenwood Bridge Co.	1,576	1,491	1,273

*Accepted.

MINNEAPOLIS, MINN.—W. S. Hewett, Minneapolis, has been awarded a contract, at $1,789, for the steel and iron work of widening the stone arch bridge over the East channel.

BOONE, IA.—It is reported that the Chicago & Northwestern Ry. Co. will construct a double track steel bridge about one-half mile in length, with 160-ft. steel piers on masonry, to cost $1,000,000, between Boone and Ogden.

BETHANY, MO.—Reports state that a 100-ft. steel bridge will be constructed near this place. C. F. Snyder, County Engr.

KANSAS CITY, MO.—The council committee has secured $36,500 from the railway companies for the construction of the proposed Allen Ave. viaduct.

LITTLE ROCK, ARK.—We are informed that the Choctaw, Oklahoma & Gulf R. R. Co. will construct a bridge across the Arkansas River, at Little Rock. The superstructure will be composed of three 400-ft. fixed spans and one 400-ft. draw span; total weight, 5,000,000 lbs. It will be designed by Henry W. Hodge, 27 Pine St., New York, and built by the Pencoyd Iron Works, Philadelphia. The substructure will be of Phoenix Oolithic limestone and constructed by McGee, Kahman & Co., of Kansas City, Mo. Work on the substructure has already begun, and the bridge will be pushed to an early completion. F. A. Molitor, Ch. Engr.

DENISON, TEX.—R. L. McWillie, Cy. Engr., writes us that it is proposed to construct a steel bridge of six spans, 80 ft. each, 20 ft. wide; capacity, 70 lbs. per sq. ft.; foundation, lattice, on stone pedestal. Inquiries have been received from bridge companies, but plans and specifications have not yet been determined upon.

MISSOULA, MONT.—A committee of the board of trade is considering the question of a new bridge across the river above the Rattlesnake, to cost about $10,000. It is reported that about $8,000 can be raised by private subscription.

WALLA WALLA, WASH.—The council has accepted a recommendation of the street committee for a steel bridge over Mill Creek on Fourth St.

DIXON, CAL.—The San Francisco Bridge Co. has been awarded a contract, at $1,033, for a combination bridge over Pleasant Valley Creek.

RANDOLPH, UTAH.—The legislature has appropriated $2,000 for a county bridge over Bear River.

HAWKESBURY, ONT.—A contract has been awarded to Ross, Barry & McRae, Toronto, for constructing a bridge over the Ottawa River on the Great Northern Ry.

PETERSBOROUGH, ONT.—Reports state that it is proposed to replace the floating bridge, 4,000 ft. long, at Mud Lake, with a new and similar structure, to cost about $12,000. John E. Belcher, County Engr.; E. Pearse, Clk.

COPENHAGEN, DENMARK.—Press reports state that the Danish government has a project under consideration for building a railway bridge across the Little Belt to unite Jutland with the Island of Feyn. The length of the bridge will be about 2,300 ft., and is to cost about $4,000,000.

BUILDINGS.

BERKSHIRE, VT.—Bids are asked until April 10 for erecting a new town hall at this place. D. M. Rublee, Chn. of Com.

FAIR HAVEN, VT.—The Park View House and other buildings were destroyed by fire March 30; reported loss, $100,000.

BOSTON, MASS.—The Badger Block, a 5-story structure on Wareham St., was damaged by fire March 29; total loss, about $75,000. Address E. E. Badger.

WOONSOCKET, R. I.—Bids are asked until April 25 for erecting a church building for the Globe Congregational Society. Address E. O. Ronian, 86 Main St.; William Butterfield, Arch., Manchester, N. H.

HARTFORD, CONN.—A fire in this city March 29 damaged the James L. Howard office building at Union Place and Asylum St., and an adjacent factory building; reported loss, $150,000.

ALBANY, N. Y.—Contracts were awarded March 27 for erecting a new building for the United Presbyterian Church at Lake and Western Aves., as follows: Collins Bros., for mason work; P. Keeler, carpentry work; James McCormick, plumbing and roofing; Welch & Chapman, stained glass. Robt. J. Rose, Arch.

BROOKLYN, N. Y.—All bids received by the board of education of New York city for alterations to Public School 70, Brooklyn, were rejected. The lowest was that of L. W. Seaman, Jr., & Son, 133 Grand Ave., at $43,000.

LOWVILLE, N. Y.—This town has voted to issue $20,000 in bonds for erecting a new town hall.

NEW YORK, N. Y.—Plans have been filed by Henry Acker, 530 East 71st St., for five 5-story brick and terra cotta dwellings on 113th St., near Lenox Ave., to cost $98,000. Charles Stegmayer, Arch., 306 East 82d St.; by Louis J. Levy, 205 East Broadway, for four 6-story brick flat and store buildings at 273 to 281 Madison St., to cost $115,000. Horenburger & Straub, Archs.; by Samuel Quincey, Mount Vernon, N. Y., for a 7-story brick flat building on Central Park West, near 92d St., to cost $100,000. G. F. Pelham, 503 5th Ave.; by Robert Wallace, 320 West 70th St., for six 5-story brick dwellings on 103d St., near West End Ave., to cost $108,000. G. F. Pelham, Arch.; by Baker & Fine, 112 Rivington St., for two brick flat and store buildings at 183 to 187 Ave. C, to cost $75,000. Fred. Ebeling, Arch.; by Ed. W. Candee, 41 West 33d St., for six 5-story brick dwellings at 102 to 110 East 65th St., to cost $150,000. Brun & Hauser, Archs., 1125 Broadway; by Lydia P. Hyde, 206 Madison Ave., for a 4-story brick and stone dwelling at 40th St. and Madison Ave., to cost $135,000. N. C. Mullen, Arch., 27 West 30th St.; by A. V. Bergen, of France, for a 5-story brick club house at 124th St. and 7th Ave., to cost $150,000. Alfred Zucker, Arch., 33 Union Square; by B. J. Ludwig, 51 East 80th St., for a 5-story brick warehouse at 34 to 38 West 14th St., to cost $200,000. Louis Korn, Arch., 37 Maiden Lane; by Gilbert C. Brown, 130 Broad St., for five 5-story brick dwellings on 65th St., near Park Ave., to cost $125,000. Buchman & Deisler, Archs.; by Walter Reid, 1842 7th Ave., for a 7-story brick flat building on 7th Ave., near 114th St., to cost $90,000. Buchman & Deisler, Archs.; by Francis S. Kinney, 33 West 54th St., for a 12-story brick hotel building at 572 to 574 Madison Ave., to cost $225,000. Howard, Cauldwell & Morgan, Archs.; by Laura E. Mander, 2115 Valentine Ave., for a 7-story brick flat building at 120th St., at St. Nicholas Ave., to cost $150,000. Thomas Graham, Arch., 1218 Madison Ave.; by Lane D. Robertson, 152 Sumner Ave., Brooklyn, N. Y., for six 5-story brick tenement buildings at Westchester and Robbins Aves., to cost $115,000. W. C. Dickerson, Arch., 149th St. and 3d Ave.——The following bids were received by the board of education March 27 for erecting a new building for School No. 179 at 101st and 102d Sts. and Amsterdam and Columbus Aves.: Mapes-Reeve Construction Co., 150 Nassau St., $308,000; P. J. Walsh, 503 5th Ave., $303,000; P. Gallagher, 150 5th Ave., $308,940; Thos. Cockerill & Son, 550 West 51st St., $314,900; Murphy Bros., 407 East 101st St., $301,000; Harry McNally, 287 4th Ave. (accepted), $296,975.

ROMER SHOALS, N. Y.—We are informed that the following bids were received April 1 for furnishing and delivering metal work (veranda, etc.), for the Romer Shoals Light Station, N. Y., as advertised in Engineering News: Lt.-Col. D. P. Heap, U. S. Engr., Tompkinsville, N. Y.: Bethlehem Foundry & Machine Co., South Bethlehem, Pa., $2,100; West Side Foundry Co., Troy, N. Y., $2,196; Ellicott Machine Co., Baltimore, Md., $2,283; Tacony Iron & Metal Co., Philadelphia, Pa., $2,836; Allentown Rolling Mills, Allentown, Pa., $3,250; North Penn Iron Co., Philadelphia, Pa., $3,680; Snead, Van Alstyne, Meldrum Co., Louisville, Ky., $3,973; Russel Wheel & Foundry Co., Detroit, Mich., $4,090.

GUTTENBERG, N. J.—Bids are asked by the council until April 8 for the purchase of $25,000 of school bonds. W. E. C. Statham, Town Clk.

PATERSON, N. J.—W. J. Rooney has been awarded the contract for the masonry work on new school building No. 3, at $49,987. A. Sanborn, Boston, Mass., received the steam heating contract, using the Baldwin system, at $7,900.

BRADDOCK, PA.—Plans have been prepared, according to reports, for a new 3-story borough hall building, to cost $20,000. J. N. Campbell, Penn Bldg., Pittsburg.

McKEESPORT, PA.—James Evans, Pres. of National Bank of McKeesport, is said to be interested in a project to erect a 5-story apartment building on Versailles Ave., to cost about $125,000.

PHILADELPHIA, PA.—Bids are being received by Reilly & Falkner, 6th and Diamond Sts., according to reports, for erecting a new $25,000 school building at Leopard St. and Girard Ave.——Plans have been prepared for two terminal ferry houses and slips for the Philadelphia & Billingsport Ferry Co. Henry D. Dagit, Arch. & Engr., 435 Chestnut St.

PORT PENN, DEL.—Bids are asked until April 7 for furnishing bathing facilities and repairs and improvements for use of the marine hospital service at Reedy Island Quarantine. R. M. Woodward is in command of station.

ANNAPOLIS, MD.—P. J. Carlin & Co., 186 Remsen St., Brooklyn, N. Y., are reported to have received the contract for constructing a sea wall, power house, armory and boat house for the Naval Academy, to cost about $2,200,000.

BALTIMORE, MD.—Plans have been completed for the proposed Posner Bldg., a 6-story fireproof office building, to be erected at Howard, Lexington and Clay Sts., at a cost of about $250,000. Chas. E. Cassell, Arch.

BALTIMORE, MD.—John Waters has been awarded the contract for making the improvements to the College of Physicians and Surgeons at Calvert and Saratoga Sts.——Reports state that John P. McGuire, Cleveland, O., will furnish the metal work for the Hooper Island, Md., light house, at $18,955; and that Wilkins & Kuemmerle, Betz Bldg., Philadelphia, will erect the structure for $29,000.

WASHINGTON, D. C.—Jas. G. Hill has been directed to prepare plans for the new $2,000,000 government printing office to be erected under the direction of the chief of engineers just south of the present structure. $350,000 is immediately available.——A large addition to the Hotel Dewey, L St., between 13th and 14th Sts., N. W., is to be built. Jas. G. Hill, Arch.

COLUMBIA, S. C.—The City Hall and Opera House were destroyed by fire March 30. Reported loss, $70,000; insurance, $35,000.

MEMPHIS, TENN.—William and Isadore Katzenberger are said to contemplate the erection of a 12-story building at Main and Madison Sts.

ATLANTA, GA.—Plans and specifications are asked by the commissioners of Fulton county for an annex to the present court house in this city.

GEORGETOWN, KY.—Bids are asked until April 12 for erecting a new public building at this place. A. H. Sinclair, Mayor.

CLEVELAND, O.—Contracts will soon be let for erecting a new 7-story brick and stone apartment building, 60 x 189 ft., to be known as "The New Amsterdam," at Euclid Ave. and Perry St.; estimated cost, $160,000. C. N. Griffin and W. J. White, Owners; Steffens, Searles & Hirsh, 131 Euclid Ave.

EUCLID, O.—Bids are asked until April 24 for erecting a brick and frame school building at Euclid. Almon Dille, Clk., Nottingham, O.

CHICAGO, ILL.—Plans have been prepared by H. L. Newhouse, 4630 Prairie Ave., for a 3-story apartment building, to be erected at Prairie Ave. and 54th St. for Andrew Duback; estimated cost, $45,000.——Marshall, Field & Co. have been granted a permit for the erection of a 10-story store and office building at Clark and Adams Sts., to cost $750,000.

DARTFORD, WIS.—Joseph Mallery, Oshkosh, Wis., was the lowest bidder for erecting the new county jail building, at $21,619.

OSHKOSH, WIS.—Plans are asked until April 10, also bids for construction, for a county jail and sheriff's residence, to cost about $23,000.

WHITEHALL, WIS.—Contracts will be let about April 20 for erecting a 2-story brick and stone county asylum building, to cost about $40,000. John Charles, Arch., Menominee, Wis.

IOWA CITY, IA.—We are informed that the following bids were received March 28 for erecting a new collegiate building for the Iowa State University; the contract was awarded conditionally to Warren, Roberts & Co.:

Warren, Roberts & Co., Chicago, Ill.	$159,850
Peoria Steam Marble Works, Peoria, Ill.	168,514
Tri-City Construction Co., Davenport, Ia.	169,427
V. Jobst & Son, Peoria, Ill.	174,800
Bartlett Record Co., Minneapolis, Minn.	179,820
C. H. Moses, Chicago	191,069
Butler, Ryan & Co., St. Paul, Minn.	185,427
C. E. H. Campbell, Council Bluffs, Ia.	180,000
Sheets & Freider, Iowa City, Ia.	189,938
P. H. McCormick Co., Columbus, Ind.	176,000
Wind & Hughes, Council Bluffs, Ia.	174,100
R. W. Stubbs Construction Co., Chicago	181,800
D. H. Hays & Co., Chicago	199,411
Wm. J. Cook, Clinton, Ia.	214,450
Zitterell & Atkinson, Webster City, Ia.	190,652
Capital City Brick & Pipe Co., Des Moines, Ia.	185,734
John Valk & Co., Rock Island, Ia.	212,021

McINTOSH, MINN.—Bids are asked by School District No 168 until April 15 for erecting a school building. H. L. Hanson, Clk.

MADISON, MINN.—We are informed that bids will be received until April 18 for erecting a 2-story brick court house, 172 x 59 ft., for Lac qui Parle county; estimated cost, $37,000. Buechner & Jacobsen, Archs., 601 Manhattan Bldg., St. Paul, Minn.; John B. Oadson, Audr.

OMAHA, NEB.—Bids are being received by the Omaha Bridge & Terminal Ry. Co., according to reports, for erecting brick and iron freight stations at 11th and Chicago Sts., to cost about $20,000. Fisher & Lawrie, Archs.; John R. Webster, Gen. Mgr.

WAYNE, NEB.—Bids are asked until April 12 for erecting a brick or stone court house for Wayne county. J. R. Coyle, County Clk.; Orff & Guilbert, Archs., Minneapolis, Minn.

RED LODGE, MONT.—Bids are asked until April 12 for erecting a new court house for Carbon county. E. J. McLean, County Clk.; P. J. Donohoe, Arch., Butte, Mont.

ROCKPORT, TEX.—J. C. Fulton and B. M. Sheldon of Rockport, are said to contemplate the erection of a new 3-story hotel building in this city, to cost about $75,000.

DENVER, COLO.—McPhee & McGinnity, wholesale dealers in building material, are about to erect a 4-story warehouse at 18th and Wazee Sts., to cost about $50,000.

DALLAS, ORE.—The lowest bid, March 23, for the construction of the court house was that of Erb & Van Patton, Salem, Ore., as follows: For stone, $24,932; chocolate brick, $24,121; red brick, $23,683. The next lowest bidder was J. B. Bridges, Portland, Ore.: Stone, $33,599; chocolate brick, $27,961; red brick, $27,431.

WATER-WORKS.

HALLOWELL, ME.—W. B. Getchell, Cy. Engr. of Augusta, writes us that the Hallowell Water Co. is having plans prepared for a masonry spillway for the reservoir dam at the city farm. C. G. Wall, Chn. Com.

MILTON, N. H.—Lyman Hayes, Fred B. Roberts and Geo. I. Jordan have been appointed a committee to engage an engineer and have surveys made for works.

LUNENBURG, MASS.—The legislative committee has reported favorably on the bill authorizing Leominster to supply this place with water.

EAST HARTFORD, CONN.—Ex-Mayor Wm. W. Hyde, Hartford, writes us that A. W. Wickham, E. E. King, E. W. Pratt and W. G. Comstock, Jr., have been appointed a committee to carry on the arrangements for the municipal ownership of the works of the East Hartford Water Co., and for constructing the sewerage system. Legislation is now being secured.

BINGHAMTON, N. Y.—Darwin Felter, Supt., has completed plans for new water mains and other improvements to the works. The wells are to be deepened, the plans for which are being prepared by the Engineering Contract Co., Mills Bldg., New York.

HONEOYE FALLS, N. Y.—The question of building municipal works is being considered.

MONTOUR FALLS, N. Y.—Governor Roosevelt has signed the bill legalizing the $33,000 of water bonds, which were sold in 1898, but were not taken owing to a plea of irregularity. Bertron & Storrs will now secure the bonds. It is probable that a contract for building the works will soon be let.

NEW YORK, N. Y.—The following are the bids received by Wm. Dalton, Comr. Water Supply, March 23, for furnishing and laying water mains in a number of streets in Brooklyn borough: Peace Bros., $126,515; James P. Graham, 85th St. and 22d Ave., Brooklyn, $90,874 (accepted); John B. Derlin, $126,504; Wm. J. Plant, $111,246; Wilson & Baillie Mfg. Co., $130,012; Jas. H. Holmes & Co., $119,026; Norton & Dalton, $122,265; Thomas McCann, $122,310; John Cornwell Jr., $123,488; Ham & Phillips, $105,167; John Horie, $117,032; Harris & Maguire, $102,973; C. H. Connell, $103,744; D. Cuozzo & Co., $118,086; J. S. Rogers, $134,377; Charles Hart, $141,854; Kelly & Byrnes, $119,447; Farrell & Hopper, $118,700; Frawley & Rooney, $118,600; Borough Construction Co., $113,316; Segretta & Mannino, $100,522; Newman & Co., $109,472; Thos. P. Murphy, $136,694.

NYACK, N. Y.—The water commissioners are trying to get the people to vote $35,000 in bonds for completing the filters, repair east half of high-service reservoir and to extend mains in South Nyack and Upper Nyack. This proposition was voted down by a large majority in 1898.

WINDSOR, N. Y.—Birdseye & Lewis, Fayetteville, N. Y., have been awarded the contract for building the works at $7,200. T. V. Furman, Pres. Village.

GLASSBORO, N. J.—The question of appropriating $12,000 for works and an electric plant is being considered.

NEWARK, N. J.—Bids are asked until April 6 for drilling a sufficient number of deep rock wells and for furnishing the materials, etc., for a supply of 5,000,000 gallons of water a day. Further information regarding this work may be found in our issue last week. M. R. Sherrerd, Engr. and Supt. Dept. Water Supply.

VINELAND, N. J.—Charles Keighley & Sons, owners of the works of Vineland, have offered to sell it to the town for $127,000.

BATH, PA.—The Bath Water Co. has been organized to build works by Geo. S. Mauser, Allen Cressman and Wilson Seem.

BRADDOCK, PA.—Press reports state that the council has received bids for the sale of the reservoir and water-works improvement bonds, that were voted by Braddock last August. The bonds issued were for $86,500.

MILLHALL, PA.—The Millhall Water Co. has secured a charter, franchise and fire plug contract for gravity works, covering Salona, Millhall and Flemington. If acted upon at once, propositions will be considered from water-works construction companies who can finance and build the works under an amicable arrangement to be made with the water company. For particulars address James P. Herdic, Williamsport, Pa.

NORTH BRADDOCK, PA.—Samuel A. Taylor, Borough Engr., 339 5th Ave., Pittsburg, writes us that this borough will probably let a contract early in the summer for building works.

PITTSBURG, PA.—Bids are asked until 2 p. m. April 7 for constructing gate-house on effluent chamber, Highland Reservoir No. 2; furnishing and placing boiler in the Garfield pumping station; supplying brass ferrules; furnishing special cast-iron sleeves for making connections to pipe lines with tapping machines, and for laying about 70,000 ft. of 6 and 8-in. cast-iron water pipe. Edward M. Bigelow, Dir. Dept. Pub. Wks.

PITTSBURG, PA.—The Laidlaw-Dunn-Gordon Co., Cincinnati, is reported to have been awarded the contract for furnishing a new 5,000,000-gallon pump for the 29th St. station of the Monongahela Water Co. Other improvements to the south side works are reported as contemplated.

LAUREL, DEL.—Emory B. Riggin and Chas. G. Otwell have been appointed a committee to inspect water-works in towns the size of Laurel; population (1890), 2,388.

SPENCER, W. VA.—This place has voted to issue bonds for works. H. D. Wells, Mayor.

FITZGERALD, GA.—Steps, it is stated, will be taken at once toward constructing works.

ST. PETERSBURG, FLA.—L. Y. Jewett writes us that the matter of building works is in the hands of the committee. The water supply will be secured either from a lake or artesian wells. Population, 1,500.

PRATT CITY, ALA.—This place has voted in favor of issuing bonds for works. Bids for the purchase of the bonds have been received and it is stated that bids for constructing the works will soon be asked. P. M. McNeill, Chn. Com.

COLUMBUS, MISS.—J. L. Ludlow, Winston, N. C., it is stated, has been engaged to prepare plans for works and a sewerage system.

NAPOLEONVILLE, LA.—Bids are asked by L. P. Hebert, Mayor, for constructing the proposed works.

SHREVEPORT, LA.—Press reports state that it is proposed to build municipal works, a sewerage system, etc.

ROCKWOOD, TENN.—D. M. Coffman, it is stated, has asked for a 40-year franchise to build works and an electric plant.

TULLAHOMA, TENN.—M. R. Campbell, Mayor, writes us that there is no immediate prospect of the city building works, sewers, etc.

LOUISVILLE, KY.—Bids were asked by the board of public works, until April 5 for constructing wells and pumps at four different points.

LEIPSIC, O.—This place is reported to have voted to build works, the construction of which will soon be let. C. W. Franklin, J. H. Edwards and Jacob Werner compose the committee.

ALBANY, IND.—The Albany Water & Light Co. was incorporated last week with a capital stock of $5,000. The contract for constructing the improvements has been let to the Seckner Contracting Co., The Rookery, Chicago, Ill., at about $32,000.

BLOOMFIELD, IND.—Plans for works and an electric plant to cost about $18,000 have been completed. C. E. Henderson, Clk. pro tem, writes us that an election to vote on the question will probably be voted upon in May.

FOWLER, IND.—Press reports state that a bill was filed in the Federal Court March 28 by W. H. Latta for a receiver for the Fowler Water-Works. The plaintiff is the Fidelity Trust & Guarantee Co., Buffalo, N. Y., trustees for the holders of $28,000 of bonds upon the plant of the company. The company supplies Fowler with water, and the town is made co-defendant. The bill alleges default of payments on the bonds and the general insolvency of the company.

PENDLETON, IND.—The Seckner Contracting Co., The Rookery, Chicago, has been awarded the contract for building works and an electric plant, at about $35,000.

CHICAGO, ILL.—Bids are asked until April 13 for furnishing the following cast-iron water pipe: 500 pieces of 4-in. internal diameter; 12,000 pieces of 6-in., 8,000 pieces of 8-in., 3,000 pieces of 12-in., 2,000 pieces of 16-in., 1,000 pieces of 24-in. The length of the pipe ordered is 74 miles, and the weight, upon which the cost is computed, will be about 9,500 tons. This pipe is expected to be laid within a year. L. E. McGann, Comr. Pub. Wks.

LA SALLE, ILL.—It is stated that the council has decided to improve the works.

OCONOMOWOC, WIS.—W. B. Fay writes us that an election was called for April 4 to vote on the question of issuing $42,000 in bonds for works.

WHITEWATER, WIS.—Sam'l G. Artingstall and H. E. Keeler, Engrs., Rialto Bldg., Chicago, and Jas. L. Pilling, the appraisers of the works of the Whitewater Water-Works Co., have submitted a report estimating the works to be worth $83,000. The city can only bond itself for $75,000, and it has therefore been decided to defer the question of the purchase for a few years.

DUBUQUE, IA.—Bids are asked for laying 20 and 24-in. water mains from Eagle Point pumping station to 1st St. for the Dubuque Water Co. Local papers state that the contract for the main building at Eagle Point will soon be let. Wm. Marshall, Dubuque, has the contract for furnishing the boilers and Peter Elsbeck has the contract for the foundations for the main pumping station. W. W. Bonson, Secy.

NORA SPRINGS, IA.—S. G. Blythe, Mayor, writes us that this place voted March 24 to issue $7,500 in bonds for works. The supply will be secured from wells. The Council met April 4 to take action toward securing bids for building the works. Jackson & Moss, Engrs., Des Moines, Ia.

SIBLEY, IA.—This place voted March 27 to issue $16,000 in bonds for works. H. Newell, Cy. Clk.

VALLEY JUNCTION, IA.—This place voted March 27 to grant a franchise for works and an electric plant. Mayor Adams and Councilman E. H. English may be addressed.

PIPESTONE, MINN.—Bids are asked until April 28 for furnishing the materials and for constructing a water tank and tower at the Indian station. DeW. S. Harris, Supt.; W. A. Jones, Comr.

WALKER, MINN.—Bids are asked until April 10 for constructing works. Chas. Kinkle, Pres.; N. Bertrand, Village Recdr.

MANDAN, N. DAK.—P. W. McGellis, Mayor, writes us that no contract has yet been made for building works and an electric plant; and it is not likely that they will be built this year.

REDLODGE, MONT.—An election will be held May 1 to vote on the question of issuing $25,000 of 5% 10-year bonds for works.

ST. CHARLES, MO.—The St. Charles Water & Heating Co. has asked for an extension to its franchise for 20 years. It proposes to lay three miles of new main, give the city 85 hydrants for $4,300, etc. The company engaged an engineer to examine the water of the Missouri River for a better supply.

ROSEBUD, TEX.—S. J. Slade, Mgr., writes us that the new water company is ready to contract for sinking an artesian well. The contract will be let at a certain price a foot for the first 1,000 ft. and so much for the next 500 ft.

TACOMA, WASH.—Mayor Nickeus and the council are considering the question of immediately securing a new water supply from the South Fork of Puyallup River, at a cost of about $360,000. John Holgate, Chmn.; J. C. Hewitt and L. E. Sampson compose the committee.

PASADENA, CAL.—J. B. Lippincott has submitted estimates for the proposed municipal works for a town of 24,000 people. There will be required 5,164 tons of cast-iron water pipes, 248 hydrants, 288 valves, a 28-in. riveted steel supply main, a 15,000,000-gallon reservoir, etc.; estimated cost, $300,000. The East Side Water Co. has secured a site for new wells for an increased water supply.

SALT LAKE CITY, UTAH.—The committee has submitted its report on the proposed improvement to the works. It is proposed to enlarge the reservoir, at a cost of $28,554; lay new pipe, to cost $14,690. F. C. Kelsey, Cy. Engr.

OTTAWA, ONT.—John Galt, Cy. Engr., has submitted estimates for enlarging the pumping station, to cost $60,000. The work will include new machinery and specials, to cost, $25,000; water wheels, to cost $10,000, etc.

ST. MARY'S, ONT.—Sami. M. Gray, Providence, R. I., has given data of the cost of building works and a sewerage system for this place. T. D. Stanley and F. E. Butcher may be addressed.

ROSSLAND, B. C.—Mayor Goodeve writes us that as yet only the engineer's report of the proposed new works has been placed before the council. The water supply will be secured from two creeks. Population, 8,000. H. B. Smith, Engr.

NAPLES, ITALY.—Press reports state that the municipality has issued a report on the needs of the water supply of the city. At an early date the expenditure of about $5,000,000 must be made and there will be required tanks, fittings, pumping engines and considerable other machinery, a large portion of which must be obtained from a foreign country.

NIKOLAIEV, RUSSIA.—The municipality wants propositions for putting in works. Population, 67,246. Full information may be secured and plans seen at the commercial department of the Foreign Office of the Secretary of State for Foreign Affairs, London, England.

IRRIGATION.

CROWLEY, LA.—Reports state that C. H. Hurd and C. H. Wright have awarded a contract to C. N. Abbott for constructing eight miles of irrigation canal.

HELENA, MONT.—The state arid land commission has awarded a contract to A. Wormser, for a canal from the Boilder River, near Big Timber, to irrigate a tract of land, and for a ditch from the Big Timber River to reclaim contiguous lands.

SPOKANE, WASH.—The Great Northern Ry. Co. is interested in plans for an extensive system of irrigation to be built along the line of the road between Wenatchee and Spokane. Preliminary surveys are about to be made.

SAN FRANCISCO, CAL.—The Pacific Improvement Co., which is a branch of the Southern Pacific Co., has purchased 2,000 acres of land adjacent to Hope Rancho and will bore a 3,000-ft. tunnel through the mountain for irrigation, according to reports.

SAN BERNARDINO, CAL.—Z. O. Smith, of Highland, has filed a claim to 50 ins. of water in Oak Canyon, and will construct a dam near Base Line.

STOCKTON, CAL.—The Stockton & Mokelumne Canal Co. has awarded a contract to the Krogh Co., of San Francisco, for installing a 40,000-gallon pump.

ASHCROFT, B. C.—The Ashcroft Water & Electric Co. has purchased about 4,000 acres of land for irrigation. Peter Ryan and John Shields, of Toronto, Ont., are interested.

NEW COMPANIES.—Hills Canal & Irrigation Co., Price, Utah; $20,000; to construct a canal from Gordon Creek, 10 miles long; L. M. Oson, Pres.; Paul Hunter, Secy.

Adrian Irrigation Co., Spokane, Wash.; to construct a canal this summer; W. A. Huneke, Secy.; Daniel Fiske, Vice-Pres.

SEWERAGE.

LEXINGTON, MASS.—The commissioners have submitted a report on the proposed system. R. P. Clapp and E. S. Spaulding compose the committee. L. A. Saville, Clk., writes us that no action has been taken.

STOCKBRIDGE, MASS.—This town has voted to build the system, at a cost of $23,000. Waring, Chapman & Farquhar, Engrs., 874 Broadway, New York.

PROVIDENCE, R. I.—Bids are asked until April 10 for constructing about 4,400 ft. of 32 to 16-in. brick, 120 ft. of 30-in. iron pipe and about 6,300 ft. of 15 to 8-in. pipe sewers. Robt. E. Smith, Comr. Dept. Pub. Wks.

EAST HARTFORD, CONN.—Ex-Mayor Wm. W. Hyde, of Hartford, writes us that a committee composed of E. E. King, A. W. Wickham and E. W. Pratt is securing legislation for the municipal control of the proposed sewers, electric plant, etc.

CATSKILL, N. Y.—This city has voted against building a sewer in Broome St.

FISHKILL, N. Y.—Benj. Hammond, Village Pres., is urging the town to build the system, to cost $30,000.

LARCHMONT MANOR, N. Y.—This place recently voted to spend about $27,000 for a new outlet sewer.

SYRACUSE, N. Y.—It is proposed to build 36 and 32-in. brick and 18 and 15-in. pipe sewers in several streets.

NEWARK, N. J.—Bids are asked until 3.30 p. m., April 6, for constructing 370 ft. of 2 ft. 2 ins. × 3 ft. 3 ins. brick and about 6,500 ft. of 24 to 12-in. sewers, and for 3,800 sq. yds. of granite block paving in Warren St. M. F. McLaughlin, Gen. Supt. of Wks.

CHARLEROI, PA.—S. A. Taylor, 339 5th Ave., Pittsburg, has completed plans for a system.

ELLWOOD, PA.—O. T. Adams, Chn., writes us that bids are asked until April 8 for the purchase of $8,000 of bonds for 3,300 ft. of 24-in. pipe sewers. Alex. Maines, Engr.

NEW BRIGHTON, PA.—Plans, it is stated, are being prepared for a system. P. D. Hall and S. F. Jackson are on the committee.

NORTH BRADDOCK, PA.—Bids are asked until April 13 for constructing about 5,100 ft. of 6 to 4½ ft. brick and 13,000 ft. of 30 to 6-in. pipe sewers, 46 manholes, 44 sewer drops, etc., as stated in our advertising columns. S. A. Taylor, Engr., 339 5th Ave., Pittsburg.

SOMERSET, PA.—James S. Haring, Crafton, Pa., has been engaged by the council to design a system and superintend the construction. Bids will be asked for about five miles of the work in a short time.

WILKINSBURG, PA.—Jas. McConegly has been awarded the contract for sewer and paving work on the property of the Hampton Land Improvement Co., to cost about $15,000. Sam'l A. Taylor, Schmidt Bldg., Pittsburg, Pa.

TYBEE ISLAND, GA.—Bids are asked until April 27 for constructing a system at Tybee Island. Jno. Simpson, A. Q. M., U. S. A., Atlanta, Ga.

COLUMBUS, MISS.—It is stated that J. L. Ludlow, Winston, N. C., has been engaged to prepare plans for a system and water-works.

BELLEFONTAINE, O.—Robt. Lamb, Chn., writes us that the question of issuing bonds for a system was to be voted upon on April 3.

WELLSVILLE, O.—The plans for a system prepared by Riggs & Sherman, The Nasby, Toledo, have been accepted. Estimated cost, $69,000. The committee consists of Councilmen Bowers, Michaels and Stevenson.

RICHMOND, IND.—It is proposed to build an intercepting sewer in North E St. G. J. Knollenberg, Cy. Clk.

BEARDSTOWN, ILL.—The question of building a system for this place is being considered.

NORMAL, ILL.—It is proposed to build a [illegible]-ft. brick sewer jointly with Bloomingdale. City Engineer Butler may be addressed.

MONTICELLO, IA.—M. Tschirgi, City Hall, Dubuque, Ia., has prepared plans for a system for this place.

MINNEAPOLIS, MINN.—All bids for the construction of sewers received last week were rejected unopened, and the city engineer instructed to do the work. Bids for furnishing the sewer brick, vitrified clay pipe, cement and special castings will be received April 14. L. A. Lydiard, Cy. Clk.; G. W. Sublette, Cy. Engr.

INDEPENDENCE, MO.—Bids are asked until April 14 for constructing about 709 ft. 18-in., 5,682 ft. of 15-in., 3,940 ft. of 12-in., 8,171 ft. of 10-in., and 18,626 ft. of 8-in. pipe. Andrew Rosewater, Engr., Bee Bldg., Omaha, Neb.; H. H. Pendleton, Cy. Engr.

ST. LOUIS, MO.—It is proposed to construct a 6-ft. brick sewer to drain Benton Park; estimated cost, $40,000.

WEBB CITY, MO.—J. P. Stewart writes us that the town will probably vote at the coming election on the question of sewerage.

CRIPPLE CREEK, COLO.—The Cripple Creek Sewer Co. has been incorporated in New Jersey, with principal office in the N. J. Registration & Trust Co.'s Bldg., East Orange, N. J. The company is to build a sewerage system for Cripple Creek; capital stock, $100,000. Incorporators, Henry M. Blackmer, Henry McAllister, Jr., Robert H. Widdicombe.

SEATTLE, WASH.—The following bids were received March 22 for constructing a sewer in East Denny Way: F. McLellan, $37,223 (accepted); T. Ryan, $37,496; Stirat & Goetz, $39,471; Erickson & Roseleaf, $39,673; Smart & Co., $39,743; Peter Costello, $41,175. It is proposed to build a sewer in Blackchapel.

THE DALLES, ORE.—The council has voted to build sewers in a number of streets. N. H. Gates, Recdr.

NEVADA CITY, CAL.—An election will be held May 6 to vote on a proposition to issue $28,000 6% bonds for a system.

PROVO, UTAH.—The question of building a system is being considered.

GARBAGE DISPOSAL—STREET CLEANING

GARDINER, MASS.—The question of a better method of garbage collection is being considered.

EAST ORANGE, N. J.—The City Wastes Disposal Co. has been incorporated to construct and maintain works for the disposal of waste material and the building of docks, piers, canals, reservoirs, tunnels, bridges and gas, electric light and water plants; capital stock $150,000, with $2,500 paid in. Wm. Lee Church, Frederick W. Garvin and Oscar L. Lefferts are the incorporators.

YOUNGSTOWN, O.—A municipal garbage collector is to be appointed to collect and carry the garbage to the new disposal plant.

HOUSTON, TEX.—Bids are asked until April 10 for furnishing and installing three small garbage disposal plants. J. A. Miller, Cy. Engr.; H. H. Dickson, Chn. Com.

SPOKANE, WASH.—The Spokane Crematory Co. has been incorporated to build a crematory and to secure a franchise, etc., for collecting and disposing of the garbage. Capital stock, $15,000; incorporators, N. Fred Essig, M. M. Cowley, S. R. Stearn.

SACRAMENTO, CAL.—Jas. H. Parkman, member of the City Bd. of Health, writes us that up to March 30 nothing has been done towards constructing a crematory, but matters are such that it is probable steps will be taken within 30 days for the necessary plant.

STREETS AND ROADS

FALL RIVER, MASS.—A contract has been awarded to Israel Picard for furnishing the city with 125,000 paving blocks.

MARBLEHEAD, MASS.—Bids are asked until 9 p. m., April 6, for furnishing the material and for constructing a wall and roadway at Fort Beach, also at Riverhead Beach. Stephen C. Felton, Town Clk.

NANTUCKET, MASS.—Rollin M. Allen, Secy. Selectmen, informs us that the following bids were received March 29 for paving: H. Gore & Co., Hilby St., Boston, block paving and curbing, North Water St., $4,856, and macadamizing Orange St., $2,746; F. A. Mitchell, Nantucket, Mass., repaving with cobbles and setting curb, Union St., $970. Other bids were received, but were considered irregular.

BRANFORD, CONN.—The town has appropriated $1,500 for roads, and has ordered a portable stone crusher.

NEW HAVEN, CONN.—A. Brazos & Sons have been awarded a contract for constructing a new street.

BINGHAMTON, N. Y.—Resolutions have been introduced in the council for brick paving on Vestal Ave., Carroll and Henry Sts. It is also proposed to pave on three other streets with brick.

CLINTON, N. Y.—The question of buying a stone crusher was voted upon March 28.

GLOVERSVILLE, N. Y.—Bids are asked until April 11 for brick paving. C. Fiske, Cy. Engr.

JAMESTOWN, N. Y.—Bids are asked by the board of public works until April 15 for furnishing the material and for constructing about 11,580 sq. yds. of brick paving and 5,700 lin. ft. of curbing.

JOHNSTOWN, N. Y.—Petitions are being signed for the paving of North Perry St. with brick.

MOUNT VERNON, N. Y.—Bids are asked until April 18 for grading and brick paving on concrete, on Mount Vernon Ave. Wm. N. Hoyt, Clk.

ROCHESTER, N. Y.—It is proposed to pave on Jay St with asphalt; also Front St. with Medina block or asphalt

SARANAC LAKE, N. Y.—Bids are asked until April 8 for about 200 rods of crushed stone road. Seaver A. Miller, Village Clk.

SYRACUSE, N. Y.—A petition has been presented to the council for the paving of South Warren St. with sheet asphalt.

ATLANTIC CITY, N. J.—An ordinance is before the council for the paving of Arctic, Missouri, Arkansas and Indiana Aves. with brick.——The Reading Ry. Co. is considering the question of macadamizing Baltic Ave.

CAMDEN, N. J.—The Vulcanite Paving Co. will establish an asphalt plant in this city.

ELIZABETH, N. J.—The council has passed resolutions to pave First Ave., Marshall, Fulton, Sixth and Stiles Sts. with asphalt, and Franklin St. with brick.

JERSEY CITY, N. J.—Bids are asked until April 18 for about 4,392 sq. yds. of Belgian block paving, grading, etc., on three streets. Geo. T. Bouton, Clk. St. and Water Comrs.

LONGPORT, N. J.—The county freeholders have awarded a contract to Alvin P. Risley, Pleasantville, for constructing the Longport Drive, and to the Delaware River Quarry & Construction Co. for furnishing the stone

MERCHANTVILLE, N. J.—Plans for the macadamizing of Park Ave. have been approved by the state road commission.

NEWARK, N. J.—Bids are asked until April 13 for grading and macadamizing Mount Hebron Road, Montclair, a distance of one mile; Bloomfield Ave., from Caldwell to Pine Brook, 1½ miles, and Fairfield Road, from Pine Brook Hotel to Two Bridges, four miles. Thos. M Gowan, Dir. Bd. of Freeholders, 800 Broad St.

WOODBURY, N. J.—Bids are asked by D. T. Mathers, Cy. Clk., until 6 p. m., April 11, for resetting about 3,500 lin. ft. of curb and laying about 3,700 sq. yds. of brick gutter. Wm. M. Carter, Cy. Engr.

BRADDOCK, PA.—We are informed that the borough of North Braddock will likely let contracts for street work in the early part of the summer. Samuel A. Taylor, Engr., 339 Fifth Ave., Pittsburg.

CARBONDALE, PA.—A petition is being circulated for the paving of Washington St. with brick.

LOAG, PA.—The supervisors of West Nantmeal are considering the question of purchasing a stone crusher.

MEADVILLE, PA.—Bids are asked until April 13 for about 27,800 sq. yds. of brick paving, grading, curbing, storm sewers, catch basins, etc., as described in our advertising columns. W. A. Doane, Cy. Engr.; D. T. McKay, Jr., Clk.

McKEES ROCKS, PA.—The question of removing the Belgian block paving on Fifth Ave. and repaving with brick, at an estimated cost of $23,000, is being considered Frank Hallam, Cy. Engr.

NAZARETH, PA.—Bids are asked until April 22 for constructing a half-mile of regulation race track for the Northampton County Agricultural Society. O. H. Knecht, Secy.

NORRISTOWN, PA.—Reports state that Upper Dublin township is advocating a loan of $100,000 for road construction.

PITTSBURG, PA.—Bids are asked until April 8 for furnishing five to ten-ton road rollers of one or more horse-power. W. E. Thompson, County Controller.—— The county commissioners have awarded contracts to Booth & Flinn for improving portions of the Beaver Road, Library Road and the Streets Run Road, and to Keeling & Ridge for the Freeport Road; estimated cost, about $12,000 per mile.

SCRANTON, PA.—The council has appropriated $17,520 for the repair of asphalt.

BALTIMORE, MD.—Bids are asked until April 12 for furnishing and laying trap-rock and asphalt blocks and for furnishing paving brick and sewer brick. Wm. W. Varney, Cy. Comr.

CHARLESTON, W. VA.—Bids are asked until 12 m., April 6, for paving three blocks with brick, about 3,300 sq. yds., and curbing and grading. W. A. Hogue, Cy Engr.; Ham Morris, Jr., Recdr.

OWENSBORO, KY.—It is reported that the council is considering the question of brick paving.

BONDHILL, O.—Bids are asked until April 25 for improving Paddock Road, according to reports. A. J. Kiphart, Village Clk.

CHILLICOTHE, O.—The council has adopted a resolution to construct brick paving this summer at a cost of $90,000, according to reports.

DAYTON, O.—Bids are asked until April 7 for paving certain sidewalks with stone, cement or asphalt, and for grading and graveling certain streets. J. G. Gimperling, Cy. Comptroller.

GENEVA, O.—A petition has been presented to the council for brick paving on East and West Main Sts.

RIPLEY, O.—A contract for one and one-half miles of pike road in Jefferson township has been awarded to Albert Brown, of Pike township, at $2,777.

CONNERSVILLE, IND.—W. F. McNaughton, Cy. Clk., informs us that contracts for grading and graveling portions of five streets will be let separately to local contractors.

FORT WAYNE, IND.—The board of public works has passed resolutions to pave five streets and three alleys.

HAMMOND, IND.—Bids are asked until April 18 for furnishing the material and for macadamizing on 150th St. Peter J. Lyons, Cy. Engr.

IRVINGTON, IND.—Bids are asked by the town board until April 22 for about three-fourths of a mile of cement walk on Lowell Ave.

KOKOMO, IND.—Bids are asked until April 10 for brick paving, according to reports. Jackson Morrow, Cy. Engr.; Chas. R. Ford, Cy. Clk.

NEWCASTLE, IND.—The council has passed an ordinance to pave 10 blocks with brick.

REMINGTON, IND.—Bids are asked until April 10 for grading and macadamizing, according to reports. Ira W. Yeoman, Town Clk.

WINDSOR, ONT.—The council of Windsor will make application to the legislature for permission to borrow $100,000 for the construction of 14 miles of pavements if the proposition is approved by the citizens.

JOLIET, ILL.—The local board of improvements has awarded a contract to R. F. Conway Co., of Chicago, at $100,000, for asphalt paving.

SPRINGFIELD, MASS.—The question of paving the road to Oakridge cemetery is being considered by Mayor Wheeler.

ST. PAUL, MINN.—Bids are asked until 2 p. m., April 6, for improving Summit Ave. C. H. Bronson, Clk.—— The board of public works has awarded a contract to Fielding & Shepley, at $22,888, for paving Cedar St. with sandstone.

LEES SUMMIT, MO.—Bids are asked until April 15 for macadamizing, according to reports. P. H. Grinter, Cy. Engr.

ST. LOUIS, MO.—Bids are asked until April 21 for improving portions of 30 streets. Robt. C. McMath, Pres. Bd. of Pub. Improvements.——The following contracts have been awarded for Novaculite paving: Chas. Warner, $8,614, $16,688, $3,726 and $2,326; M. A. Hogan, $5,233; J. E. Perkinson, $2,890, $2,867 and $1,849; St. Louis Stone Mfg. Co., $11,076; T. E. Cavanagh, $2,871; John A. Lohrum, $5,233 and $2,652, and G. Eyermann, $5,798.

ST. LOUIS, MO.—Bids are asked by the board of public improvements until April 18 for grading 10 streets, repaving with brick on three streets, preparing the ground and laying brick paving on nine streets, granite block paving on Jefferson Ave. and repairing rock asphalt on Euclid Ave.

OAKLAND, CAL.—Webster St. will be remacadamized from 14th St. to the bridge. J. W. Tompkins, Cy. Clk.

WINNIPEG, MAN.—C. J. Brown, Cy. Clk., informs us that a contract was awarded March 22 to Kelly Bros. & Co., Winnipeg, at $6,855, for an asphalt plant without engine and boiler.

MANUFACTURING PLANTS.

MADISON, ME.—Reports state that the Manufacturing Investment Co., owning a water-power and pulp mill at this place, has decided to enlarge its plant, and to add a paper mill at an estimated cost of $500,000, work to begin about May 1.

ALBANY, N. Y.—Wallerstein's shirt factory, at North Ferry St. and Broadway, was damaged by fire April 1; reported loss, $80,000.

LAUREL HILL (L. I.), N. Y.—Wm. B. Pollock & Co., Youngstown, O., are said to have received the contract for erecting a steel stack 25 ft. in diameter at the base, and 335 ft. high, at the works of the Nicholas Chemical Co. at Laurel Hill.

LONG ISLAND CITY, N. Y.—Nicholas P. Young and Martin A. Metzner, of this city, contemplate the enlargement of their bagging factory at Vernon and Harris Aves.

CAMDEN, N. J.—The New York Shipbuilding Co., recently incorporated, with a capital of $3,000,000, proposes to erect a plant at Cooper's Point on the Delaware River in this city, at a cost of $1,000,000.

CARPENTERSVILLE, N. J.—Reports state that S. T. Longman, of Longman & Martinez, exporters of paints and oils, will erect a plant in this city for the manufacture of Portland cement; estimated cost, about $1,000,000.

BRADFORD, PA.—Van Cleve & Palmer, Cleveland, O., inform us that bids will be received at once for erecting a window glass factory for the Pennsylvania Window Glass Works at Bradford. H. B. Coe, Arch., 1002 Society for Savings Bldg., Cleveland.

MALVERN, PA.—It is reported that the Hires Root Beer Co. will soon remove its plant to this city.

ROXBORO, N. C.—Reports state that J. A. Long and others will erect a 5,000-spindle mill in this city; estimated cost, $70,000.

DUBLIN, GA.—F. H. Roberson, Dublin, informs us that bids will be received in April for the erection of a 2-story brick oil mill, 1-story frame seed house, hull house and meal house, for the manufacture of cotton seed products; estimated cost of buildings, $4,500 to $5,000. A 125-HP. Corliss engine and 150-HP. boilers, an electric lighting plant and oil machinery have yet to be contracted for.

BIRMINGHAM, ALA.—Reports state that the Maryland Cement Co., Baltimore, Md., is to erect a slag-cement mill with a capacity of from 1,000 to 3,000 barrels a day at Ensley City.

DECATUR, ALA.—It is reported that a cotton-oil mill will be erected in this city at a cost of $100,000.

CANTON, O.—Reports state that the Goughnour Electrical Co. will erect a new building which will be equipped with electrical traveling cranes and other machinery, to be used in the manufacture of motors, dynamos, and electrical apparatus.

CINCINNATI, O.—It is reported that the Pabst Brewing Co. of Milwaukee, will erect a plant in this city.

HAMILTON, O.—Reports state that the Long & Allstatter Co. will increase the capacity of its foundry by building a large addition to its present structure.

KALAMAZOO, MICH.—We are informed that Hauser, Hayden & Owen, Grand Rapids, Mich., have the contract for the erection of a $75,000 plant for the Kalamazoo Beet Sugar Co.; estimated cost of equipment, $200,000. Fred. W. Woolf & Co., Archs., Chicago, Ill.

MENOMINEE, MICH.—Reports state that C. M. Garrison, of Detroit, will organize a company, with a capital of $1,000,000, to erect a beet sugar factory in this city; estimated cost, $500,000.

CHICAGO, ILL.—The Illinois Chemical Co. is to erect a plant at Chicago Heights. All the structures will be of brick, stone and steel; estimated cost, $55,000. J. L. Silsbee, Arch., Chicago.

MINNEAPOLIS, MINN.—Reports state that the Minneapolis & St. Louis Ry. Co. is making extensive additions to its shops at Cedar Lake.

BARKER, TEX.—The contract for the erection of buildings for the plant of the Meadowbrook Cotton Mill Co. has been awarded to Evans & Athens, of Cleburne, Tex.; estimated cost $75,000.

FAIRFIELD, WASH.—Reports state that D. C. Corbin and others, of Spokane, Wash., will erect a beet sugar factory in this city with a capacity of 50 tons of sugar a month.

FLORISTON, CAL.—Reports state that a pulp and paper plant is to be erected in this city; estimated cost, $250,000. Projectors of the scheme are interested in pulp and paper plants in Oregon.

SAN FRANCISCO, CAL.—The wholesale hardware house of Miller, Schloss & Scott was damaged by fire April 1; reported loss, about $400,000.

MANILA, PHILIPPINES.—The De la Vergne Refrigerating Machine Co., East 138th St., New York, was the lowest bidder for the construction of a large combination refrigerating and ice manufacturing plant for the U. S. government at Manila, at $195,162. The other bidders were Theodore Vitter, Milwaukee, Wis., $205,820, and the Frick Co., Waynesboro, Pa., $215,613.

MISCELLANEOUS CONTRACTS.

WHARF.—Providence, R. I.—The Providence, Fall River & Newport Steamboat Co. will reconstruct its wharf.

TIMBER BULKHEADS.—Boston, Mass.—Bids are asked until April 10 for timber bulkheads on Summer St. extension. Wm. Jackson, Cy. Engr.

RIP-RAP.—Two Harbors, Minn.—Bids are asked until May 1 for rip-rap embankment, at Agate Bay, as stated in our advertising columns. Maj. Clinton B. Sears, U. S. Engr., Duluth.

PARK WORK.—Indianapolis, Ind.—Contracts will be let about May 1 for a dam, roadways and buildings for Riverside Park. Address Engineer Power, Park Bd.

DOCK AND FILL.—Chicago, Ill.—The Pullman Palace Car Co. proposes to establish a dock line in Lake Calumet by filling in 1,000 ft. into the lake between 107th and 119th Sts., according to reports.

ARMOR PLATE.—Washington, D. C.—Bids are asked by the bureau of ordnance, navy department, until May 31 for about 24,000 tons of armor plate for naval vessels. Chas. H. Allen, Acting Secy.

DREDGING.—New York, N. Y.—Bids are asked until May 2 for dredging in Wallabout Channel, and until May 3 for dredging in Gowanus Creek Channel, as stated in our advertising columns. Maj. H. M. Adams, U. S. Engr.

RIVER WORK.—Chicago, Ill.—A contract has been awarded to the Lydon & Drews Co., 79 Dearborn St., at about $128,000, for about 260,000 cu. yds. of dredging and about 4,800 lin. ft. of docks, in the Chicago River. Major Wm. L. Marshall, U. S. Engr.

FEEDER CANAL.—Tampico, Ill.—Bids are asked until May 9 for constructing about 13 miles of feeder of the Illinois & Mississippi Canal, as described in our advertising columns. Maj. Wm. L. Marshall, U. S. Engr., 1637 Indiana Ave., Chicago; L. L. Wheeler, Asst. Engr., Sterling, Ill.

WHARVES.—Baltimore, Md.—The Baltimore Steam Packet Co. has applied to Building Inspector Dowell for a permit to reconstruct its Light St. wharves, to cost about $150,000. One of the structures will be two stories high and 32 × 246 ft., and the other 50 × 142 ft., and 1-story. Baldwin & Pennington, Archs.; E. M. Noel, contractor.

CONTRACT PRICES.

ASPHALT PAVING.—Hartford, Conn.—C. H. Bunce, Cy. Engr., informs us that the following bids were received March 20, 1899, for sheet asphalt paving: C. H. Northam, Pres. Bd. St. Comrs.: Allyn St., 6,066 sq. yds., Southern New England Paving Co., Hartford, $2.56 a sq. yd.; Warren-Scharf Paving Co., 81 Fulton St., New York, $2.72; Trinidad Asphalt Refining Co., 50 Wall St., New York, $2.56; Farrington Ave., 16,140 yds., Southern New England Paving Co., $2.59; Warren-Scharf Paving Co., $2.72; Trinidad Refining Co., $2.61; Gold St., 1,455 yds., Southern New England Co.,$2.55; Warren-Scharf Asphalt Co., $2.72; Trinidad Co., $2.54; High St., 6,543 yds., Southern New England Co., $2.56; Warren-Scharf Co., $2.72; Trinidad Co., $2.57; Market St., 1,845 yds., Southern New England Co., $2.56; Warren-Scharf Co., $2.72; Trinidad Co., $2.57; Windsor Ave., 10,633 yds., Southern New England Co., $2.59; Warren-Scharf Co., $2.72; Trinidad Co., $2.60. The contracts have all been let to the Southern New England Paving Co., Hartford. The Trinidad Asphalt Refining Co. stated that its bids were based on all the streets or none. The asphalt is to be laid on 6 ins. of concrete, with American Portland cement. The prices do not include grading, as this work is done by the city.

BRICK, PIPE AND CURBING.—Wheeling, W. Va.—A. L. White, Cy. Engr., informs us that the following bids were received March 21, 1899, for furnishing paving brick, sewer pipe and curbing for the year: Paving block—Mack Mfg. Co., Pittsburg, Pa., $11.82 a 1,000; McMahon, Porter & Co., New Cumberland, W. Va., $12.32; Camden Clay Co., Spillman, W. Va., $12,000. Repressed brick—Mack Mfg. Co., $8.94; McMahon, Porter & Co., $9.15; Globe Fire Brick Co., New Cumberland, W. Va., $8.60; Parker Fire Clay Co., Rochester, Pa., $10,000. Standard wire-cut brick—Mack Mfg. Co., $7.82; McMahon, Porter & Co., 88.00; Globe Fire Brick Co., $7.60; Park Fire Clay Co., $9.00. Contracts awarded to Globe Fire Brick Co. for repressed and standard wire-cut. Will use about 1,000,000. To be delivered by rail f. o. b. Wheeling. Curbing, furnished and set—Jacob Sweitzer, resetting old curb, 11 cts. a lin. ft.; Cleveland Stone Co., stone, 58 cts.; Tippecanoe, stone, 50 cts.; Wm. Stobbs, resetting old curb, 9 cts.; Malone Stone Co., stone, 58 cts.; Freeport Stone Co., 55 cts. Contract awarded to Wm. Stobbs for Malone Stone Co.'s stone (Berea stone). Will use about 3,000 lin. ft. new stone. Sewer pipe, f. o. b. cars, Wheeling—T. A. Little, Wheeling, single strength, 82% off list; double strength, 15-in., 80%; double strength, 18-in., 78½%; double strength, 20-in., 75%; double strength, 24-in., 73%. Awarded to T. A. Little. Will use about 2,500 ft. Hauling sewer pipe, cars to ditch—Joseph Robrecht, 40 cts. a ton. Brick from cars to work—Wm. Carney, 94 cts. a M.

WATER DEPARTMENT SUPPLIES.—Reading, Pa.—The following bids were received March 29, 1899, for furnishing the water board with supplies: Corporation cocks—H. Mueller Mfg. Co., Decatur, Ill., 500 ½-in., 36.45 cts. each; 100 ¾-in., 67.5 cts.; 40 1-in., $1.0395; total, $291 (awarded contract). Pea coal, 1,500 tons—C. H. Hunter, $2.60 a ton (awarded contract). Cast-iron gate boxes, 50,000 lbs.—Reading Foundry Co., Ltd., 1.85 cts. a lb. (awarded contract). Laying pipe and setting gates, boxes and fire hydrants: To lay 100 ft. of 24-in. pipe; 4,000 ft. 20-in., 3,000 ft. 16-in., 1,000 ft. 12-in., 1,500 ft. 10-in., 500 ft. 8-in., 4,000 ft. 6-in.; setting one 24-in. gate and boxes, 10 20-in., 12 16-in., 4 12-in., 6 10-in., 2 8-in., 20 6-in.; setting 20 fire hydrants; excavating 300 cu. yds. of rock, and 300 cu. yds. of extra excavation—Howard E. Ahrens, $4,300 (awarded contract); John K. Faust, $5,416; S. W. Frescoln, $4,684; A. Lincoln Frame, $5,281. Oils and grease: Engine oil—S. M. Ensline, 19 cts a gallon; Atlantic Refining Co., 20 cts.; N. T. Kunkle & Son, 20 cts.; cylinder oil—S. M. Ensline, 42 cts.; N. T. Kunkle & Son, 45 cts., 37 cts., 30 cts., 25 cts., respectively; Atlantic Refining Co., 30 cts.; Albany grease—S. M. Ensline, Philadelphia (awarded contract) 12 cts.; N. T. Kunkle & Son, 15 cts.; Atlantic Refining Co., 12 cts. The bids were for 100 gallons of engine oil, 400 of cylinder oil, and 100 lbs. of Albany grease. Fire hydrants, 40—Reading Foundry Co., $29 each; T. H. Morgan, $28; Rensselaer Mfg. Co., Troy, N. Y. (awarded contract), $27.60. Water gates: 50 6-in., 5 8-in., 10 10-in., 10 12-in. 16 16-in., 8 20-in., 1 24-in., 1 30-in., and 1 36-in.—Williamsport Valve & Hydrant Co., 10-in. $24.50, 12-in. $33.20, 16-in. $68.50, 20-in. $126, 24-in. $185, 30-in. $340, 36-in. $585; total, $4,506. T. H. Morgan, 6-in. $10, 8-in. $15.25, 10-in. $21.50, 12-in. $28, 16-in. $54, 20-in. $120, 24-in. $165, 30-in. $290, 36-in. $510. Reading Foundry Co., Ltd., 6-in. $11, 8-in. $17, 10-in. $25, 12-in. $29, 16-in. $55, 20-in. $110, 24-in. $175, 30-in. $300, 36-in. $500; total, $3,910; Rensselaer Mfg. Co., 6-in. $12.60, 8-in. $18.90, 10-in. $26.10, 12-in. $34.20, 16-in. $76, 20-in. $142, 24-in. $215.50, 30-in. $340, 36-in. $530; total, $4,885 (awarded contract); Cast iron pipe and specials: Bell and spigot pipes, 12 ins. diameter or less, 150 gross tons—Reading Foundry Co., $24.42 a ton; Camden Iron Works, $24.90; Bell and spigot pipes, over 12 ins., 800 gross tons—Reading Foundry Co., $24.42 a ton; Camden Iron Works, $23.90; Special castings, 150,000 lbs.—Reading Foundry Co., 2 cts. a lb.; Camden Iron Works, 2½ cts.; Flange pipe, 12 ins. diameter or less, 5 gross tons—Reading Foundry Co., $39.20 a ton; Camden Iron Works, $39; Flange pipe, over 12 ins., 5 gross tons—Reading Foundry Co., $39.20 a ton; Camden Iron Works, $34.80; Flange specials, 3,000 lbs.—Reading Foundry Co., 3¼ cts. a lb; Camden Iron Works 3.65 cts; Total—Reading Foundry Co., Ltd., $26,689 (awarded contract); Camden Iron Works, $27,084.

WATER DEPARTMENT SUPPLIES.—McKeesport, Pa.—The following contracts were let last week for furnishing valves, lead pipe, etc.: Cast-iron pipe—National Foundry & Pipe Works, Scottdale, Pa., $22.60 for 4, 6 and 8-in.; $21.60 for 10 to 30-in.; specials, 2¼ cts. a lb. Coal—Kelley & Dry, McKeesport, delivering in barges in the river at the main pumping station, per 100 bushels of coal over 1¼-in. screen, $3.50; run of mine, $3; nut, $3.25; nut and slack mixed, $2.60. Coal for the high-service station—John Hurrell's Sons Co., to be delivered at the station in wagons, a 100 bushels coal over 1¼-in. screen, $5.50; run

of mine, $4.45; nut and slack mixed, $3.25. Valves—Pittsburg Supply Co., Eddy valves, 4-in. $6, 6-in. $9, 8-in. $15, 10-in. $21, 12-in. $29.50. Contract was awarded subject to the conditions of approval, that the valves be all heavy valves and that the rate of discount be the same on all valves. The Bailey-Farrell Mfg. Co., Pittsburg, will furnish small valves, check valves, cast-iron fittings and plumbers' supplies. The Pittsburg Supply Co. was awarded the contract for lead pipe at 5¼ cts. a lb., and pig lead at 5 cts. a lb. straight.

WATER-WORKS.—Windsor, N. Y.—We are informed that the following bids were received March 23, for furnishing the materials and for constructing water-works, as advertised in Engineering News:

BIDS RECEIVED AT WINDSOR, N. Y., MARCH 23, 1899, FOR CONSTRUCTION OF WATER-WORKS.

Bidder.	Hydrants, 29, 6-in. bottom.	Hydrants, 11, 4-in. bottom.	Gate valves, 8-in., 10.	Gate valves, 6-in., 14.	Gate valves, 4-in., 18.	Valve boxes, 42.	Laying cast-iron pipe, 8-in., 5,136 ft.	Laying cast-iron pipe, 6-in., 6,456 ft.	Laying cast-iron pipe, 4-in., 14,244 ft.	Rock excavation, cu.yd., trench.	Reservoir complete.	Extra, Earth excav. in reservoir.	Extra, Puddle excavation.	Extra, Concrete in reservoir.	Dam complete.	Extra, Excavation.	Extra, Concrete.	Extra, Puddle.	Brick, per cu. ft. or M.
Fred P. Spaulding, Bethlehem, Pa.	....	....	....	....	....	....	$0.20	$0.17	$0.15	$2.50	$2,000	$0.20	$3.00	$5.00	$600	$0.40	$6.00	$3.00	$7.00
John J. Nolan, Carbondale, Pa.	....	....	....	....	....	....	.25	.22½	.20¼	1.50	2,499	.19½	1.50	5.00	1,300	.21	5.00	1.50	.44 ft.
J. F. Richardson, Owego, N. Y.	....	....	....	....	....	....	.19½	.15	.12	1.40	3,110	.50	1.00	6.00	730	1.00	7.00	1.00	14.00 M.
Loveland & Giles, Carbondale, Pa.	....	....	....	....	....	....	.27	.24	.21	1.47	2,584	.20	1.45	4.95	1,385	.20	4.95	1.45	.44 ft.
Bolton G. Coon, Kingston, Pa.	$24.00	$23.00	$17.50	$11.50	$6.75	$3.00	.19½	.17½	.13½	1.80	1,700	.35	.90	5.00	850	.35	5.00	1.00	15.00 M.
A. M. Banker, Gloversville, N. Y.	....	....	....	....	....	....	.25	.30	.20	6.00	2,813	.40	1.50	7.50	834	.25	9.00	1.50	15.00 "
Stewart M. Neff, 120 Liberty St., New York	24.00	21.00	14.00	8.50	5.50	2.50	.25	.23	.19	2.50	2,900	.50	1.50	6.50	1,000	.50	6.50	1.50	9.00 "
Humphrey & Rowe, Ashland, Pa.	....	....	....	....	....	....	.18	.16	.12½	2.00	2,740	.22	1.00	6.40	751	.25	6.00	1.00	10.00 "
H. B. Hooker & Son Rochester, N. Y.	24.00	23.25	17.50	11.75	6.75	2.85	.30	.26	.24	3.00	2,000	.20	1.50	7.00	650	.20	7.00	1.50	10.00 "
W. F. Boysen, Buffalo, N. Y.	Manufacturers' prices.						.17	.15	.10	1.50	2,370	.30	.50	5.00	1,160	.30	5.00	.50	8.00 "
Baker & Judson, Gloversville, N. Y.	....	....	....	....	....	....	.20	.19	.17	3.00	2,500	.40	1.25	8.00	800	.40	8.00	1.25	9.00 "
Chas. T. Hookway, Syracuse, N. Y.	24.00	23.50	17.50	12.50	7.00	3.00	.25	.25	.20	1.50	2,500	.30	.60	6.00	1,080	.35	7.00	.75	8.00 "
C. H. Wilson, Buffalo, N. Y.	Manufacturers' prices.						.20	.17	.15	2.00	2,498	.25	2.00	6.00	1,000	.50	6.00	2.00	12.00 "
John N. Segrist, Utica, N. Y.	....	....	....	....	....	....	.18	.16	.14	2.00	2,200	.30	1.50	5.00	1,400	.30	5.00	1.50	10.00 "
D. M. Rosser, Kingston, Pa.	24.00	21.50	15.50	10.00	6.50	2.50	.22	.32	.18	3.00	2,801	.40	4.00	6.00	900	1.00	6.00	4.00	12.00 "
Castor & Brown, Belaire, O.	....	....	....	....	....	....	.18½	.16	.14½	1.95	2,500	.25	1.00	5.75	1,100	.25	5.75	1.00	20.00 "
Jehial Vaughn, Stamford, N. Y.	18.70	18.70	13.00	9.30	5.50	2.25	.18	.16	.14	.05	1,900	.20	1.50	4.90	500	1.00	7.00	1.50	10.00 "
C. Ludington, Rochester, N. Y.	23.00	21.50	15.00	9.50	6.00	2.50	.18	.31	.14	2.00	1,913	.40	1.50	4.50	504	.35	4.50	1.50	10.00 "
Ray B. Lewis, Herkimer, N. Y.	24.00	23.00	17.50	11.75	6.75	2.50	.15	.14	.12	.35	1,946	.30	1.25	6.00	474	.40	6.00	1.25	12.00 "
J. O. Frost's Sons, Towanda, Pa.	21.50	21.00	16.00	9.50	6.25	2.50	....	....	....	....	....	....	....	....	....	....	....	....	....
R. D. Wood & Co., Philadelphia, Pa.	24.50	24.50	15.50	9.80	6.50	2.50	....	....	....	....	....	....	....	....	....	....	....	....	....
M. J. Drummond & Co., New York	23.60	20.75	13.55	8.20	5.45	2.45	....	....	....	....	....	....	....	....	....	....	....	....	....
Eddy Valve Mfg. Co., Waterford, N. Y.	24.00	23.25	17.50	11.75	6.75	2.85	....	....	....	....	....	....	....	....	....	....	....	....	....
Michigan Brass & Iron Wks., Detroit, Mich.	21.60	20.40	13.25	9.00	5.40	2.50	....	....	....	....	....	....	....	....	....	....	....	....	....
Kennedy Valve Mfg. Co., New York.	23.00	21.50	15.00	9.50	6.00	2.50	....	....	....	....	....	....	....	....	....	....	....	....	....
Chapman Valve Mfg. Co., Indian Orchard.	21.98	21.50	15.51	9.43	6.53	....	....	....	....	....	....	....	....	....	....	....	....	....	....
J. Thompson & Co., Philadelphia.	22.00	21.50	16.00	9.50	6.75	2.65	....	....	....	....	....	....	....	....	....	....	....	....	....

Contracts awarded: Hydrants—Eddy Valve Mfg. Co.; Gate Valves and Boxes—R. D. Wood & Co.; Laying Pipe, excavating, building reservoir, dam and receiving basins—Ray B. Lewis. The total cost of works is $7,299.

CEMENT, ETC.—New York, N. Y.—The following contracts are said to have been let March 31, 1899, by the engineer corps, Army building, for furnishing cement, etc., for various forts: Atlas Cement Co., New York, 12,500 bbls. Portland cement, $1.97 a bbl for delivery at Forts Totten and Schuyler, N. Y.; also 25,000 bbls. of cement at $1.99 a bbl. for delivery at Fort Hancock, N. J. Harry Goodwin, New York, 11,000 cu. yds. of sand at 34 cts. for delivery at Fort Hancock, N. J. Jacob E. Conkling, New York, 21,000 cu. yds. of broken stone at 84 cts. a yd. delivery as above.

ENGINEERING MATERIAL PRICES.

TRACK MATERIALS—
New York—Angle bars, 1.35 cts. to 1.40 cts.; spikes, 1.70 cts. to 1.80 cts.; track bolts, 2.10 cts. to 2.20 cts.
Chicago—Angle bars, 1.35 cts. to 1.50 cts.; spikes, 1.90 cts. to 1.95 cts.; track bolts, hexagonal, 2.60 cts. to 2.70 cts.; square, 2.40 cts. to 2.50 cts.

RAILS, STEEL—
New York, new, $26.00 to $28.00.
Chicago, new, $25.00 to $27.00; old iron, $17.00 to $17.50; steel, $11.25 to $12.50.
Pittsburg, new, $25.00; old iron, $17.00 to $18.00; old steel, $12.50 to $13.50.

STRUCTURAL STEEL—
New York—Beams, 1.55 cts. to 1.65 cts.; channels, 1.55 cts. to 1.65 cts.; tees, 1.55 cts. to 1.60 cts.; angles, 1.45 cts. to 1.50 cts.; rivets, 1.75 cts. to 1.85 cts.
Chicago—Beams, 1.55 cts. to 1.70 cts.; channels, 1.55 cts. to 1.70 cts.; tees, 1.60 cts. to 1.65 cts.; angles, 1.55 cts. to 1.65 cts.
Pittsburg—Beams, 1.40 cts. to 1.50 cts.; channels, 1.40 cts. to 1.50 cts.; tees, 1.45 cts.; angles, 1.40 cts.; zees, 1.40 cts.

PLATES AND SHEETS—
New York—Universal mill plates, 2.00 to 2.10 cts.; tank, 2.05 cts. to 2.15 cts.; shell, 2.30 cts. to 2.35 cts.; flange, 2.40 cts. to 2.45 cts.; firebox, 2.40 cts. to 2.45 cts.
Chicago—Universal mill plates, 2.10 cts. to 2.20 cts.; tank, 2.00 cts. to 2.15 cts.; shell, 2.40 cts. to 2.55 cts.; flange, 2.10 cts. to 2.25 cts.; firebox, 3.00 cts.; sheets, 2.25 cts. and upwards.
Pittsburg—Tank, 1.85 cts. to 2.00 cts.; shell, 2.20 to 2.25 cts.; flange, 2.10 cts.; firebox, 2.50 cts. and upwards; sheets, 2.50 cts.

MERCHANT STEEL—
Machinery per lb., 2.30 cts. to 2.40 cts.

IRON—
Pig iron:
New York—No. 1, $15.75 to $16.25; No. 2, $15.25 to $15.75.
Chicago—No. 1, $15.50 to $16.00; No. 2, $15.00 to $15.50.
Pittsburg—No. 1, $14.50 to $15.00; No. 2, $15.25 to $15.50.
Bar iron:
New York, common, 1.25 cts. to 1.35 cts.; refined, 1.40 cts. to 1.45 cts.
Sheets:
Common, American per lb., 2.15 cts. to 2.75 cts.

LUMBER—
New York:
Hemlock timber, 20 ft. and under, per M, $12.00 to $12.50.
Piling, Eastern spruce, 35 to 40 ft., 30 to 40% 12-in. butts, 4.00 cts. to 4.25 cts.
Spruce, special cargoes, per M, $15.00 to $17.50.
Yellow pine, random cargoes, $15.50 to $17.00.
North Carolina pine, $2.25 to $2.40 advance over Norfolk rates.
San Francisco:
Oregon pine, per M, $15.50 to $17.50.
Redwood, per M, $18.20 to $20.00.
Redwood tank stock, up to 10 ft., $24.00 to $25.00.

GENERAL MATERIALS—
Lead, New York, 4.30 cts. to 4.35 cts.
Solder, per lb., 8½ cts. to 13 cts.
Spelter, per lb., 5.25 cts. to 5.35 cts.
Copper ingots, 17.75 cts. to 18.00 cts.
Granite, rough, New York, cu. ft., 40 cts. to 50 cts.
Limestone, New York, cu. ft., 70 cts. to 80 cts.
Ohio freestone, New York, cu. ft., 85 cts. to 90 cts.
Slate, Penn., block, per square, $4.00 to $5.00.
White lead, American, per lb., 5½ cts. to 6 cts.
Lime, common slate, per bbl., 75 cts.

INDUSTRIAL NOTES.

PEPPER & REGISTER, Engineers and General Contractors, Philadelphia, have removed their offices from 1414 South Penn Square to rooms 712-715 Fidelity Mutual Life Building, 112 North Broad St.

THE FORT WAYNE ELECTRIC CORPORATION, Fort Wayne, Ind., will have its entire plant sold at public auction in that city April 18. Samuel L. Morris and C. H. Worden are the Receivers.

THE GILLETTE-HERZOG MFG. CO., Minneapolis, has purchased from the Receivers the malleable iron business of the Walter A. Wood Harvester Co. The business will be continued as heretofore, and with few changes in either the working force or management. It will be operated under the name of the Minnesota Malleable Iron Works, The Gillette-Herzog Mfg. Co., Proprietors, Manhattan Building, St. Paul.

THE STILWELL-BIERCE & SMITH-VAILE Co., Dayton, O., through its New York office, has just closed a contract for pumping machinery for a sugar plantation in Vera Cruz. The company reports that its plant is being operated night and day to keep up with its orders. It also announces that it is not now and does not propose to become a member of any trust or combination.

THE BULLOCK ELECTRIC MFG. CO., Cincinnati, moved into its Norwood plant in December, and at present, although the increased facilities have more than trebled the output, the company has begun working night and day. The new plant of the Bullock company at East Norwood is claimed to be the third largest electrical establishment in America. All the machine tools are driven with individual motors, with an entire absence of belts and shafts.

THE KINNEAR & GAGER CO., Columbus, O., announces that it has an unusually large number of orders in hand from various parts of the country for its steel rolling shutters, about one-half of the orders being for shutters for freight and engine houses. The new catalogue of this company claims several strong points in favor of these shutters.

HENRY R. WORTHINGTON, New York, has the contract for the entire equipment of pumping machinery for furnishing the water supply for the Paris Exposition in 1900. The pumping plant will consist of four Worthington horizontal high-duty triple-expansion condensing engines, 12 and 20 and 34 × 26 × 24, having a total capacity of 44,000,000 gallons in 24 hours, against a total head of 37 lbs., with 150 lbs. steam. The engines will be of the most approved Worthington type, each supplied with a surface condenser in the suction and attached air pump.

STREET PAVING.

MEADVILLE, PA.

The Select and Common Councils of the City of Meadville, Pa., will receive sealed proposals until

THURSDAY, APHIL 13, 1899,

at 8 o'clock p. m., for the grading, paving and curbing of North Street (from Water Street to South Grant Street), of Market Street (north of Centre Street), and of Pine Street (from French Street to Grove Street), in accordance with the plans and specifications on file at the office of the City Engineer.

The approximate quantities for said streets respectively, are as follows, to wit:

North Street Quantities.

10,680 sq.yds. of brick paving upon a concrete foundation complete, including grading, etc., as per specifications.

Bidders will also give a price in case pitch joints are used throughout.

Bidders will also give a price in case Portland cement is used for the concrete—cement 1 part, sand 3 parts, gravel or broken stone 6 parts.

6,485 lin. ft. curbing, 6 × 22 ins.
315 " " curbing, 4 × 18 ins.
450 " " edge stones, 2½ × 12 ins.
8,000 lbs. cast-iron plates, inlets, etc.
2 No. 1 catchbasins (revised plan).
9 No. 2 catchbasins (revised plan).
50 lin. ft. of 15-in. storm sewer.
940 " " 12-in. " "
260 " " 10-in. " "
100 " " 4-in. tile and stone drain.
Stone box culvert.
1,100 lin. ft. 6-in. sanitary sewer in branches
1,000 cubic yards of earth excavation.
30 " " masonry.
14 " " masonry (paving).

Market Street Quantities.

3,755 sq. yds. brick paving upon a concrete foundation complete, including grading, etc., as per specifications.

Bidders will also give a price in case pitch joints are used throughout.

Bidders will also give a price in case Portland cement is used for the concrete—cement 1 part, sand 3 parts, gravel or broken stone 6 parts.

2,290 lin. ft. curbing, 6 × 22 ins.
100 " " curbing, 4 × 18 ins.
170 " " edge stones, 2½ × 12 ins.
2,000 lbs. cast-iron plates, inlets, etc.
220 lin. ft. 15-in. storm sewer.
520 " " 12-in. " "
110 " " 10-in. " "
5 No. 2 catchbasins (revised plan).
50 lin. ft. 6-in. sanitary sewer in branches

Pine Street Quantities.

13,465 sq. yds. brick paving on concrete foundataion complete,including grading,etc., as per specifications.

Bidders will also give a price in case pitch joints are used throughout.

Bidders will also give a price in case Portland cement is used for the concrete—cement 1 part, sand 3 parts, gravel or broken stone 6 parts.

8,830 lin. ft. of 6 × 22-in. curbing.
220 " " 4 × 18-in. (crossings).
120 " " 4 × 18-in. edge stones.
630 " " 2½ × 12-in. edge stones.
10,600 lbs. of cast-iron plates, inlets, etc.
4 No. 1 catchbasins, duplex tops (revised plan).
12 No. 1 catchbasins (revised plan).
2 No. 2 " "
330 lin. ft. of 24-in. storm sewer.
640 " " 20-in. " "
40 " " 15-in. " "
1,000 " " 12-in. " "
270 " " 10-in. " "
100 " " 4-in. tile and stone drain.
480 " " 6-in. sanitary sewer, in branches.

Separate proposals must be made for each street on blanks attached to specifications, etc., which will be furnished by the City Clerk on application; they must be sealed, endorsed "Bids for Paving ..... Street," and sent to the City Clerk, Meadville, Pa. A bond with sufficient sureties, or a certified check, payable to the City Treasurer, in $1,000 each for North and Pine Streets, and $400 for North Market Street, must accompany each bid, or the same will not be considered.

The right is reserved to reject any or all bids. Those for each street to be considered separately. D. T. McKAY, JR.,
W. A. DOANE, City Clerk.
City Engineer. 14-1t

U.S. ENGINEER OFFICE, 185 Euclid Ave., Cleveland, O., March 27, 1899.—Sealed proposals for DREDGING in Cleveland Harbor, O., will be received here until 2 o'clock p.m., Standard time, Apr. 26, 1899, and then publicly opened. Information furnished on application. JARED A. SMITH, Col., Engrs. 13-2t

U. S. ENGINEER OFFICE, Army Building, New York, N.Y., March 25, 1899.—Sealed proposals for DREDGING East Channel, New York Harbor, will be received here until 12 m., April 24, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 13-4t

U. S. ENGINEER OFFICE, Army Building, New York, N.Y., March 25, 1899.—Sealed proposals for the purchase and removal of 25,000 cubic yards, more or less, of broken stone, owned by the United States, and stored on land near Spuyten Duyvil, New York city, will be received here until 12 m., April 28, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 13-4t

U. S. ENGINEER OFFICE, Duluth, Minn., April 1, 1899.—Sealed proposals for RIP-RAP EMBANKMENT at Agate Bay (Two Harbors) Minn., will be received here until noon, May 1 1899, and then publicly opened. Information on application. CLINTON B. SEARS, Major, Engrs. 14-4t

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., March 31st, 1899.—Sealed proposals for constructing thirteen miles, or less, of Feeder of Illinois & Mississippi Canal, from Mile 17 to Mile 29, south of Tampico, Ill., will be received here until 12 noon, Central time, May 9th, 1899, and then publicly opened. Information furnished on application here, or to Assistant Engineer, L. L. Wheeler, Sterling, Ill. W. L. MARSHALL, Major, Engrs. 14-5t

U. S. ENGINEER OFFICE, Army Building, New York, April 3, 1899.—Sealed proposals for DREDGING in Gowanus Creek Channel, N.Y., will be received here until 12 o'clock, noon, May 3, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 14-4t

U. S. ENGINEER OFFICE, Army Building, New York, April 3, 1899.—Sealed proposals for DREDGING in Wallabout Channel, N. Y., will be received here until 12 o'clock, noon, May 2, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 14-4t

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